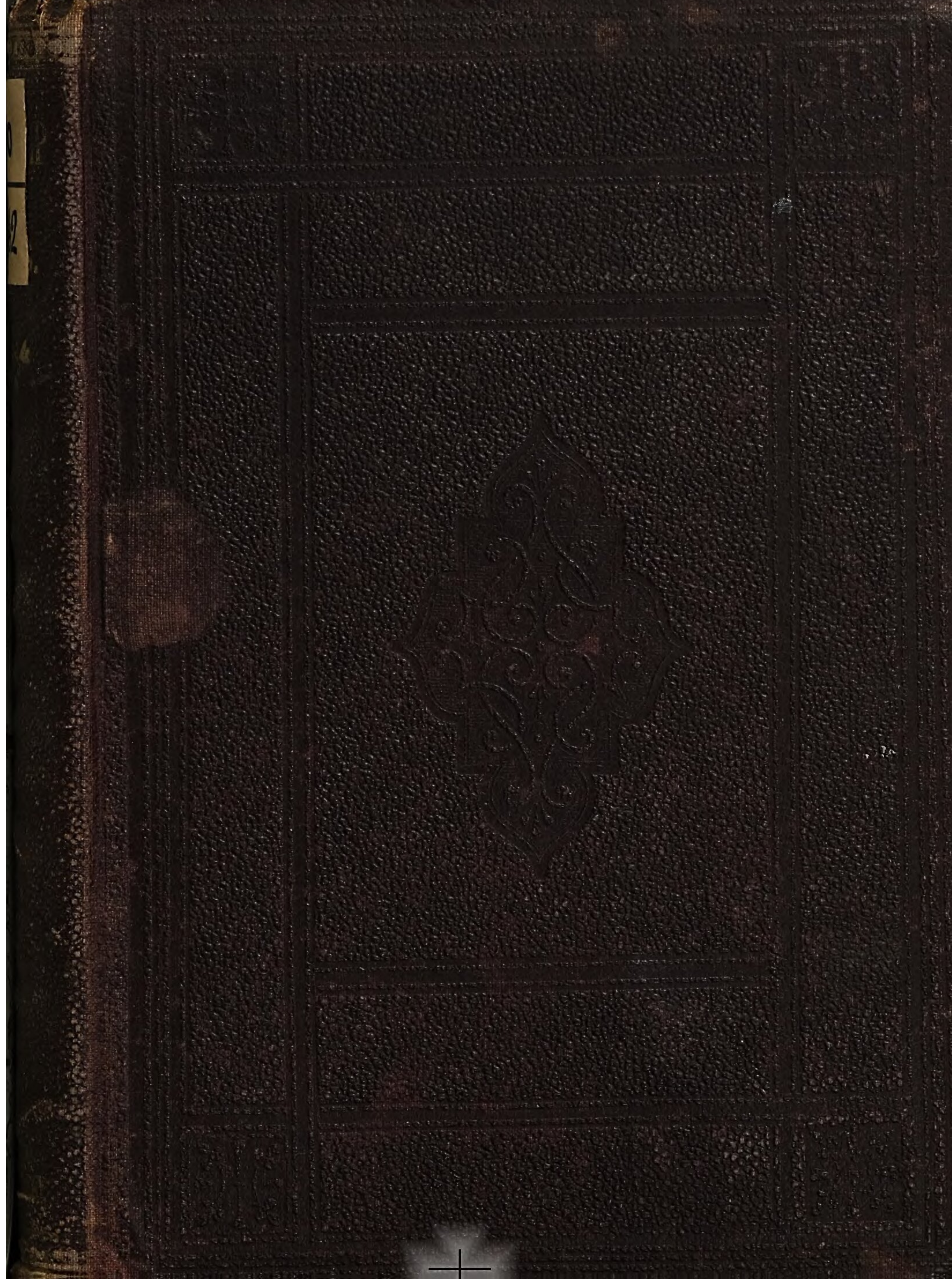




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SELF-HELP;

WITH ILLUSTRATIONS OF

CHARACTER AND CONDUCT.

By SAMUEL SMILES,

AUTHOR OF 'THE LIFE OF GEORGE STEPHENSON.'

“ This above all,—To thine own self be true ;
And it must follow, as the night the day,
Thou canst not then be false to any man.”

SHAKESPEARE.

SIXTIETH THOUSAND.

LONDON:

JOHN MURRAY, ALBEMARLE STREET.

1864.

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INTRODUCTION.

THE origin of this book may be briefly told.

Some fifteen years since, the author was requested to deliver an address before the members of some evening classes, which had been formed in a northern town for mutual improvement, under the following circumstances:—

Two or three young men of the humblest rank resolved to meet in the winter evenings, for the purpose of improving themselves by exchanging knowledge with each other. Their first meetings were held in the room of a cottage in which one of the members lived; and, as others shortly joined them, the place soon became inconveniently filled. When summer set in, they adjourned to the cottage garden outside; and the classes were then held in the open air, round a little boarded hut used as a garden house, in which those who officiated as teachers set the sums, and gave forth the lessons of the evening. When the weather was fine, the youths might be seen, until a late hour, hanging round the door of the hut like a cluster of bees; but sometimes a sudden shower of rain would dash the sums from their slates, and disperse them for the evening unsatisfied.

Winter, with its cold nights, was drawing near, and what were they to do for shelter? Their numbers had by

this time so increased, that no room of an ordinary cottage could accommodate them. Though they were for the most part young men earning comparatively small weekly wages, they resolved to incur the risk of hiring a room; and, on making inquiry, they found a large dingy apartment to let, which had been used as a temporary Cholera Hospital. No tenant could be found for the place, which was avoided as if a plague still clung to it. But the mutual improvement youths, nothing daunted, hired the cholera room at so much a week, lit it up, placed a few benches and a deal table in it, and began their winter classes. The place soon presented a busy and cheerful appearance in the evenings. The teaching may have been, as no doubt it was, of a very rude and imperfect sort; but it was done with a will. Those who knew a little taught those who knew less—improving themselves while they improved the others; and, at all events, setting before them a good working example. Thus these youths—and there were also grown men amongst them—proceeded to teach themselves and each other, reading and writing, arithmetic and geography; and even mathematics, chemistry, and some of the modern languages.

About a hundred young men had thus come together, when, growing ambitious, they desired to have lectures delivered to them; and then it was that the author became acquainted with their proceedings. A party of them waited on him, for the purpose of inviting him to deliver an introductory address, or, as they expressed it, “to talk to them a bit;” prefacing the request by a modest statement of what they had done and what they were doing. He could not fail to be touched by the admirable self-helping spirit

which they had displayed; and, though entertaining but slight faith in popular lecturing, he felt that a few words of encouragement, honestly and sincerely uttered, might not be without some good effect. And in this spirit he addressed them on more than one occasion, citing examples of what other men had done, as illustrations of what each might, in a greater or less degree, do for himself; and pointing out that their happiness and well-being as individuals in after life, must necessarily depend mainly upon themselves—upon their own diligent self-culture, self-discipline, and self-control—and, above all, on that honest and upright performance of individual duty, which is the glory of manly character.

There was nothing in the slightest degree new or original in this counsel, which was as old as the Proverbs of Solomon, and possibly quite as familiar. But old-fashioned though the advice may have been, it was welcomed. The youths went forward in their course; worked on with energy and resolution; and, reaching manhood, they went forth in various directions into the world, where many of them now occupy positions of trust and usefulness. Several years after the incidents referred to, the subject was unexpectedly recalled to the author's recollection by an evening visit from a young man—apparently fresh from the work of a foundry—who explained that he was now an employer of labour and a thriving man; and he was pleased to remember with gratitude the words spoken in all honesty to him and to his fellow-pupils years before, and even to attribute some measure of his success in life to the endeavours which he had made to work up to their spirit.

The author's personal interest having in this way been attracted to the subject of Self-Help, he was accustomed to add to the memoranda from which he had addressed these young men; and to note down occasionally in his leisure evening moments, after the hours of business, the results of such reading, observation, and experience of life, as he conceived to bear upon it. One of the most prominent illustrations cited in his earlier addresses, was that of George Stephenson, the engineer; and the original interest of the subject, as well as the special facilities and opportunities which the author possessed for illustrating Mr. Stephenson's life and career, induced him to prosecute it at his leisure, and eventually to publish his biography. The present volume is written in a similar spirit, as it has been similar in its origin. The illustrative sketches of character introduced, are, however, necessarily less elaborately treated—being busts rather than full-length portraits, and, in many of the cases, only some striking feature has been noted; the lives of individuals, as indeed of nations, often concentrating their lustre and interest in a few passages. Such as the book is, the author now leaves it in the hands of the reader; in the hope that the lessons of industry, perseverance, and self-culture, which it contains, will be found useful and instructive, as well as generally interesting.

London, September 1850.

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SELF-HELP, &c.

CHAPTER 1.

SELF-HELP—NATIONAL AND INDIVIDUAL.

“The worth of a State, in the long run, is the worth of the individuals composing it.”—*J. S. Mill.*

“We put too much faith in systems, and look too little to men.”—*B. Disraeli.*

“HEAVEN helps those who help themselves” is a well-tried maxim, embodying in a small compass the results of vast human experience. The spirit of self-help is the root of all genuine growth in the individual; and, exhibited in the lives of many, it constitutes the true source of national vigour and strength. Help from without is often enfeebling in its effects, but help from within invariably invigorates. Whatever is done *for* men or classes, to a certain extent takes away the stimulus and necessity of doing for themselves; and where men are subjected to over-guidance and over-government, the inevitable tendency is to render them comparatively helpless.

Even the best institutions can give a man no active aid. Perhaps the utmost they can do is, to leave him *free* to develop himself and improve his individual condition. But in all times men have been prone to believe that their happiness and well-being were to be secured by means of institutions rather than by their own conduct. Hence the value of legislation as an agent in human advancement has always been greatly over-estimated. To

constitute the millionth part of a Legislature, by voting for one or two men once in three or five years, however conscientiously this duty may be performed, can exercise but little active influence upon any man's life and character. Moreover, it is every day becoming more clearly understood, that the function of Government is negative and restrictive, rather than positive and active ; being resolvable principally into protection—protection of life, liberty, and property. Hence the chief “ reforms ” of the last fifty years have consisted mainly in abolitions and disenactments. But there is no power of law that can make the idle man industrious, the thriftless provident, or the drunken sober ; though every individual can be each and all of these if he will, by the exercise of his own free powers of action and self-denial. Indeed all experience serves to prove that the worth and strength of a State depend far less upon the form of its institutions than upon the character of its men. For the nation is only the aggregate of individual conditions, and civilization itself is but a question of personal improvement.

National progress is the sum of individual industry, energy, and uprightness, as national decay is of individual idleness, selfishness, and vice. What we are accustomed to decry as great social evils, will, for the most part, be found to be only the outgrowth of our own perverted life ; and though we may endeavour to cut them down and extirpate them by means of Law, they will only spring up again with fresh luxuriance in some other form, unless the conditions of human life and character are radically improved. If this view be correct, then it follows that the highest patriotism and philanthropy consist, not so much in altering laws and modifying institutions, as in helping and stimulating men to elevate and improve themselves by their own free and independent action.

The Government of a nation itself is usually found to be but the reflux of the individuals composing it. The Government that is ahead of the people will be inevitably

dragged down to their level, as the Government that is behind them will in the long run be dragged up. In the order of nature, the collective character of a nation will as surely find its befitting results in its law and government, as water finds its own level. The noble people will be nobly ruled, and the ignorant and corrupt ignobly. Indeed, liberty is quite as much a moral as a political growth—the result of free individual action, energy, and independence.

It may be of comparatively little consequence how a man is governed from without, whilst everything depends upon how he governs himself from within. The greatest slave is not he who is ruled by a despot, great though that evil be, but he who is the thrall of his own moral ignorance, selfishness, and vice. There have been, and perhaps there still are, so-called patriots abroad, who hold it to be the greatest stroke for liberty to kill a tyrant, forgetting that the tyrant usually represents only too faithfully the millions of people over whom he reigns. But nations who are enslaved at heart cannot be freed by any mere changes of masters or of institutions; and so long as the fatal delusion prevails, that liberty solely depends upon and consists in government, so long will such changes, no matter at what cost they be effected, have as little practical and lasting result as the shifting of the figures in a phantasmagoria. The solid foundations of liberty must rest upon individual character; which is also the only sure guarantee for social security and national progress. In this consists the real strength of English liberty. Englishmen feel that they are free, not merely because they live under those free institutions which they have so laboriously built up, but because each member of society has to a greater or less extent got the root of the matter within himself; and they continue to hold fast and enjoy their liberty, not by freedom of speech merely, but by their steadfast life and energetic action as free individual men.

Such as England is, she has been made by the thinking

and working of many generations; the action of even the least significant person having contributed towards the production of the general result. Laborious and patient men of all ranks—cultivators of the soil and explorers of the mine—inventors and discoverers—tradesmen, mechanics, and labourers—poets, thinkers, and politicians—all have worked together, one generation carrying forward the labours of another, building up the character of the country, and establishing its prosperity on solid foundations. This succession of noble workers—the artisans of civilization—has created order out of chaos, in industry, science, and art: and as our forefathers laboured for us, and we have succeeded to the inheritance which they have bequeathed to us, so is it our duty to hand it down, not only unimpaired, but improved, to our successors.

This spirit of self-help, as exhibited in the energetic action of individuals, has in all times been a marked feature in the English character, and furnishes the true measure of our power as a nation. Rising above the heads of the mass, there have always been a series of individuals distinguished beyond others, who have commanded the public homage. But our progress has been owing also to multitudes of smaller and unknown men. Though only the generals' names may be remembered in the history of any great campaign, it has been mainly through the individual valour and heroism of the privates that victories have been won. And life, too, is "a soldiers' battle," men in the ranks having in all times been amongst the greatest of workers. Many are the lives of men unwritten, which have nevertheless as powerfully influenced civilization and progress as the more fortunate Great whose names are recorded in biography. Even the humblest person, who sets before his fellows an example of industry, sobriety, and upright honesty of purpose in life, has a present as well as a future influence upon the well-being of his country; for his life and character pass unconsciously into the lives of others, and propagate good example for all time to come.

Biographies of great, but especially of good men, are, nevertheless, most instructive and useful, as helps, guides, and incentives to others. Some of the best are almost equivalent to gospels—teaching high living, high thinking, and energetic action for their own and the world's good. British biography is studded over, as “with patines of bright gold,” with illustrious examples of the power of self-help, of patient purpose, resolute working, and steadfast integrity, issuing in the formation of truly noble and manly character; exhibiting in language not to be misunderstood, what it is in the power of each to accomplish for himself; and illustrating the efficacy of self-respect and self-reliance in enabling men of even the humblest rank to work out for themselves an honourable competency and a solid reputation.

Foreign observers have noted, as one of the most marked characteristics of the Englishman, his strong individuality and distinctive personal energy,—refusing to merge himself in institutions, but retaining throughout his perfect freedom of thought, and speech, and action. “*Que j’aime la hardiesse Anglaise! que j’aime les gens qui disent ce qu’ils pensent!*” was the expressive exclamation of Voltaire. It is this strong individualism which makes and keeps the Englishman really free, and brings out fully the action of the social body. The energies of the strong form so many living centres of action, round which other individual energies group and cluster themselves; thus the life of all is quickened, and, on great occasions, a powerful energetic action of the nation is secured.

It is this energy of individual life and example acting throughout society, which constitutes the best practical education of Englishmen. Schools, academies, and colleges, give but the merest beginnings of culture in comparison with it. Far higher and more practical is the life-education daily given in our homes, in the streets, behind counters, in workshops, at the loom and the plough, in counting-houses and manufactories, and in all the busy haunts of

men. This is the education that fits Englishmen for doing the work and acting the part of free men. This is that final instruction as members of society, which Schiller designated "the education of the human race," consisting in action, conduct, self-culture, self-control,—all that tends to discipline a man truly, and fit him for the proper performance of the duties and business of life,—a kind of education not to be learnt from books, or acquired by any amount of mere literary training. With his usual weight of words, Bacon observes, that "Studies teach not their own use; but that is a wisdom without them, and above them, won by observation;" a remark that holds true of actual life, as well as of the cultivation of the intellect itself. For all observation serves to illustrate and enforce the lesson, that a man perfects himself by work much more than by reading,—that it is life rather than literature, action rather than study, and character rather than biography, which tend perpetually to renovate mankind.

Goethe, in one of his conversations with Eckermann at Weimar, once observed, "It is very strange, and I know not whether it lies in mere race, in climate and soil, or in their healthy education, but certainly Englishmen seem to have a great advantage over most other men. We see here in Weimar only a minimum of them, and those, probably, by no means the best specimens, and yet what splendid fellows they are! And although they come here as seventeen-year-old youths, yet they by no means feel strange in this strange land; on the contrary, their entrance and bearing in society is so confident and quiet that one would think they were everywhere the masters, and the whole world belonged to them." "I should not like to affirm, for all that," replied Eckermann, "that the English gentlemen in Weimar are cleverer, better educated, and better hearted than our young men." "That is not the point," said Goethe; "their superiority does not lie in such things; neither does it lie in their birth and fortune; it lies precisely in their having the courage to *be* what

nature made them. There is no *halfness* about them. They are *complete* men. Sometimes complete fools also, that I heartily admit; but even that is something, and has its weight." Thus, in Goethe's eyes the Englishman fulfilled, to a great extent, the injunction given by Lessing to those who would be men: "Think wrongly if you please, but think for *yourself*."

Another foreigner, a German, Herr Wiese,* in contrasting the English and German systems of education,—the one aiming chiefly at the culture of character, the other of intellect,—has observed, that in the lives of celebrated men, English biographers lay far more stress upon energy of purpose, patience, courage, perseverance, and self-control, than upon their scientific ardour or studiousness in youth; that, in short, the English give the chief prominence to the individual element, and attach far more value to character than to intellect,—a remark not less true than tending to important conclusions; as pointing, indeed, to the fundamental characteristics of our national strength—the product, as it is, of individual thinking, individual action, and individual character.

Take, again, the opinion of a well-known French writer, M. Rendu,† as to what constitutes the essential value of the English system. He holds that it best forms the social being, and builds up the life of the individual, whilst at the same time it perpetuates the traditional life of the nation; and that thus we come to exhibit what has so long been the marvel of foreigners—a healthy activity of individual freedom, and yet a collective obedience to established authority—the unfettered energetic action of persons, together with the uniform subjection of all to the national code of Duty. Whilst French institutions educate the soldier and the functionary, English institutions, which give free action to every man and woman, and recognise an educator in each,

* Deutsche Briefe über Englische Erziehung.

† De l'Instruction Primaire à Londres, dans ses Rapports avec l'Etat Social.

cultivate the citizen, ready alike for the business of practical life and for the responsible duties of the home and the family. And although our schools and colleges may, like those of France and Germany, turn out occasional forced specimens of over-cultured minds, what we may call the national system does on the whole turn out the largest number of men, who, to use Rendu's words, "reveal to the world those two virtues of a lordly race—perseverance in purpose, and a spirit of conduct which never fails."

It is this individual freedom and energy of action, so cordially recognised by these observant foreigners, that really constitutes the prolific source of our national growth. For it is not to one rank or class alone that this spirit of free action is confined, but it pervades all ranks and classes; perhaps its most vigorous outgrowths being observable in the commonest orders of the people.

Men great in science, literature, and art—apostles of great thoughts and lords of the great heart—have sprung indiscriminately from the English farm and the Scotch hill-side, from the workshop and the mine, from the blacksmith's stithy and the cobbler's stool. The illustrations which present themselves are indeed so numerous, that the difficulty consists in making a selection from them, such as should fall within the compass of a reasonable book. Take for instance, the remarkable fact, that from the barber's shop rose Sir Richard Arkwright, the inventor of the spinning-jenny, and the founder of the cotton manufacture of Great Britain; Lord Tenterden, one of the most distinguished of English Lord Chief Justices; and Turner, the very greatest among landscape painters.

No one knows to a certainty what Shakespeare was; but it is unquestionable that he sprang from a very humble rank. His father was a butcher and grazier; and Shakespeare himself is supposed to have been in early life a woolcomber; whilst others aver that he was an usher in a school, and afterwards a scrivener's clerk. He truly seems to have

been "not one, but all mankind's epitome." For such is the accuracy of his sea phrases that a naval writer alleges that he must have been a sailor; whilst a clergyman infers from internal evidence in his writings, that he was probably a parson's clerk; and a distinguished judge of horse-flesh insists that he must have been a horse-dealer. Shakespeare was certainly an actor, and in the course of his life "played many parts," gathering his wonderful stores of knowledge from a wide field of experience and observation. In any event, he must have been a close student, and a hard worker; and to this day his writings continue to exercise a powerful influence upon the formation of English character.

The common class of day labourers has given us Brindley the engineer, Cook the navigator, and Burns the poet. Masons and bricklayers can boast of Ben Jonson, who worked at the building of Lincoln's Inn, with a trowel in his hand and a book in his pocket, Edwards and Telford the engineers, Hugh Miller the geologist, and Allan Cunningham the writer and sculptor; whilst among distinguished carpenters we find the names of Inigo Jones the architect, Harrison the chronometer-maker, John Hunter the physiologist, Romney and Opie the painters, Professor Lee the Orientalist, and John Gibson the sculptor.

From the weaver class have sprung Simpson the mathematician, Bacon the sculptor, the two Milners, Adam Walker, John Foster, Wilson the ornithologist, Dr. Livingstone the missionary traveller, and Tannahill the poet. Shoemakers have given us Sir Cloudesley Shovel the great Admiral, Sturgeon the electrician, Samuel Drew the essayist, Gifford the editor of the 'Quarterly Review,' Bloomfield the poet, and William Carey the missionary; whilst Morrison, another laborious missionary, was a maker of shoe-lasts. Within the last year, a profound naturalist has been discovered in the person of a shoemaker at Banff, named Thomas Edwards, who, while maintaining himself by his trade, has devoted his leisure to the study

of natural science in all its branches, his researches in connexion with the smaller crustaceæ having been rewarded by the discovery of a new species, to which the name of "Praniza Edwardsii" has been given by naturalists.

Nor have tailors been altogether undistinguished, Jackson the painter having worked at that trade until he reached manhood. But, what is perhaps more remarkable, one of the gallantest of British seamen, Admiral Hobson, who broke the boom at Vigo, in 1702, originally belonged to this calling. He was working as a tailor's apprentice near Bonchurch, in the Isle of Wight, when the news flew through the village, that a squadron of men-of-war were sailing off the island. He sprang from the shop-board, and ran down with his comrades to the beach, to gaze upon the glorious sight. The tailor-boy was suddenly inflamed with the ambition to be a sailor; and springing into a boat, he rowed off to the squadron, gained the admiral's ship, and was accepted as a volunteer. Years after, he returned to his native village full of honours, and dined off bacon and eggs in the cottage where he had worked as a tailor's apprentice.

Cardinal Wolsey, De Foe, Akenside, and Kirke White, were the sons of butchers; Bunyan was a tinker, and Joseph Lancaster a basket-maker. Among the great names identified with the invention of the steam-engine are those of Newcomen, Watt, and Stephenson; the first a blacksmith, the second a maker of mathematical instruments, and the third an engine-fireman. Huntingdon the preacher was originally a coalheaver, and Bewick, the father of wood-engraving, a coalminer. Dodsley was a footman, and Holcroft a groom. Baffin the navigator began his sea-faring career as a man before the mast, and Sir Cloudesley Shovel as a cabin-boy. Herschel played the oboe in a military band. Chantrey was a journeyman carver, Etty a journeyman printer, and Sir Thomas Lawrence the son of a tavern-keeper. Michael Faraday, the son of a poor blacksmith, was in early life appren-

ticed to a bookbinder, and worked at that trade until he reached his twenty-second year: he now occupies the very first rank as a philosopher, excelling even his master, Sir Humphry Davy, in the art of lucidly expounding the most difficult and abstruse points in natural science.

Not long ago, Sir Roderick Murchison discovered at Thurso, in the far north of Scotland, a profound geologist, in the person of a baker there, named Robert Dick. When Sir Roderick called upon him at the bakehouse in which he baked and earned his bread, Robert Dick delineated to him by means of flour upon a board, the geographical features and geological phenomena of his native county, pointing out the imperfections in the existing maps, which he had ascertained by travelling over the country in his leisure hours. On further inquiry, Sir Roderick ascertained that the humble individual before him was not only a capital baker and geologist, but a first-rate botanist. "I found," said the Director-General of the Geographical Society, "to my great humiliation, that this baker knew infinitely more of botanical science, aye, ten times more, than I did; and that there were only some twenty or thirty specimens of flowers which he had not collected. Some he had obtained as presents, some he had purchased, but the greater portion had been accumulated by his industry, in his native county of Caithness; and the specimens were all arranged in the most beautiful order, with their scientific names affixed."

It is the glory of our country that men such as these should so abound; not all equally distinguished, it is true, but penetrated alike by the noble spirit of self-help. They furnish proofs of cheerful, honest working, and energetic effort to make the most of small means and common opportunities. For opportunities as we shall afterwards find, fall in the way of every man who is resolved to take advantage of them. The facts of nature are open to the peasant and mechanic, as well as to the philosopher, and by nature they are capable of making a moral use of those facts

to the best of their power. Thus, even in the lowliest calling, the true worker may win the very loftiest results.

The instances of men in this country who, by dint of persevering application and energy, have raised themselves from the humblest ranks of industry to eminent positions of usefulness and influence in society, are indeed so numerous that they have long ceased to be regarded as exceptional. Looking at some of the more remarkable instances, it might almost be said that early encounter with difficulty and adverse circumstances was the necessary and indispensable condition of success. The House of Commons has always contained a considerable number of such self-raised men—fitting representatives of the industrial character of the British people; and it is to the credit of our Legislature that such men have received due honour there. When the late Joseph Brotherton, member for Salford, in the course of the discussion on the Ten Hours Bill, detailed with true pathos the hardships and fatigues to which he had been subjected when working as a factory boy in a cotton mill, and described the resolution which he had then formed, that if ever it was in his power he would endeavour to ameliorate the condition of that class, Sir James Graham rose immediately after him, and declared, amidst the cheers of the House, that he did not before know that Mr. Brotherton's origin had been so humble, but that it rendered him more proud than he had ever before been of the House of Commons, to think that a person risen from that condition should be able to sit side by side, on equal terms, with the hereditary gentry of the land.

There is a member of the present House of Commons whom we have heard introducing his recollections of past times with the words, "When I was working as a weaver boy at Norwich;" and there are many more who have sprung from conditions equally humble. But perhaps the most interesting story of difficulties encountered and overcome by manful struggle, is that of the present member for Sunderland, Mr. W. S. Lindsay, the well-known shipowner.

It was told by himself, in his own simple words, to the electors of Weymouth some years ago, in answer to an attack which had been made upon him by his political opponents. At the age of fourteen, he said, he had been left, an orphan boy, to push his way in the world. He left Glasgow for Liverpool with only four shillings and sixpence in his pocket; and so poor was he that the captain of the steamer had pity on him, and had told him that he would give him his passage if he would trim the coals in the coalhole. He did so, and thus worked his passage. He remembered that the fireman gave him a part of his homely dinner, and never did he eat a dinner with such relish, for he felt that he had worked for it and earned it; and he wished the young to listen to his statement, for he himself had derived a lesson from that voyage which he had never forgotten. At Liverpool, he remained for seven weeks before he could get employment; he abode in sheds, and his four and sixpence maintained him, until at last he found shelter in a West Indiaman. He entered as a boy, and before he was nineteen he had risen to the command of an Indiaman. At twenty-three he retired from the sea; his friends, who when he wanted assistance had given him none, having left him that which they could no longer keep. He settled on shore; his career had been rapid; he had acquired prosperity by close industry, by constant work, and by keeping ever in view the great principle of doing to others as you would be done by.

But the same characteristic feature of energetic industry happily has its counterpart amongst the other ranks of the community. The middle and well-to-do classes are constantly throwing out vigorous offshoots in all directions—in science, commerce, and art—thus adding effectively to the working power of the country. Probably the very greatest name in English philosophy is that of Sir Isaac Newton, who was the son of a yeoman, the owner and farmer of a little property at Woolsthorpe, in Lincolnshire, worth only about thirty pounds a-year. The distinguished astro-

nomer Adams, the discoverer of Neptune, was born in the same condition of life; his father being a small farmer on one of the bleakest spots on Dartmoor, a region in which, however sterile the soil may be, it is clear that nature is capable of growing the manliest of men.

The sons of clergymen, and ministers of religion generally, have particularly distinguished themselves in our country's history. Amongst them we find the names of Drake and Nelson, celebrated in naval heroism; of Wollaston, Young, Playfair, and Bell, in science; of Wren, Reynolds, Wilson, and Wilkie, in art; of Thurlow and Campbell, in law; and of Addison, Thomson, Goldsmith, Coleridge, and Tennyson, in literature. Lord Hardinge, Colonel Edwardes, and Major Hodson, so honourably known in Indian warfare, were also the sons of clergymen. Indeed, the empire of England in India was won and held chiefly by men of the middle class—such as Clive, Warren Hastings, and their successors—men, for the most part, bred in factories, and trained to habits of practical business.

Among the sons of attorneys we find Edmund Burke, Smeaton the engineer, Scott and Wordsworth, and Lords Somers, Hardwick, and Dunning. Sir William Blackstone was the posthumous son of a silk-mercator. Lord Gifford's father was a grocer at Dover; Lord Denman's a physician. Judge Talfourd's a country brewer; and Lord Chief Baron Pollock's was a rather celebrated saddler at Charing Cross. Layard, the discoverer of the monuments of Nineveh, was an articled clerk in a London solicitor's office; and Sir William Armstrong, the inventor of hydraulic machinery and of the Armstrong ordnance, was also trained to the law, and even practised for some time as an attorney. Milton was the son of a London scrivener, and Pope and Southey were the sons of linendrapers. Professor Wilson was the son of a Paisley manufacturer, and Lord Macaulay of an African merchant. Keats was a druggist, and Sir Humphry Davy a country apothecary's apprentice. Speaking of himself, Davy once said, "What I am I have made myself: I say

this without vanity, and in pure simplicity of heart." Richard Owen, the Newton of natural history, began life as a midshipman, and did not enter upon the line of scientific research in which he has since become so distinguished, until comparatively late in life. He laid the foundations of his knowledge while engaged in cataloguing the magnificent museum of specimens accumulated by the industry of John Hunter, a work which occupied him at the College of Surgeons during a period of not less than ten years.

In all these cases strenuous individual application was the price paid for distinction; excellence of any sort being invariably placed beyond the reach of indolence. It is the diligent hand and head alone that maketh rich—in self-culture, growth in wisdom, and in business. Even when men are born to wealth and high social position, any solid reputation which they may individually achieve is only attained by energetic application; for though an inheritance of acres may be bequeathed, an inheritance of knowledge and wisdom cannot. The wealthy man may pay others for doing his work for him, but it is impossible to get his thinking done for him by another, or to purchase any kind of self-culture. Indeed, the doctrine that excellence in any pursuit is to be achieved by laborious application only, holds as true in the case of the man of wealth as in that of Drew and Gifford, whose only school was a cobbler's stall, or Hugh Miller, whose only college was a Cromarty stone quarry.

The knowledge and experience which produce wisdom can only become a man's individual possession and property by his own free action; and it is as futile to expect these without laborious, pains-taking effort, as it is to hope to gather a harvest where the seed has not been sown. It is related of Grosteste, an old bishop of Lincoln, possessing great power in his day, that he was once asked by his stupid and idle brother to make a great man of him. "Brother," replied the bishop, "if your plough is broken, I'll pay for the mending of it; or, if your ox should die, I'll buy you another; but I cannot make a great man of you; a

ploughman I found you, and I fear a ploughman I must leave you."

Riches and ease, it is perfectly clear, are not necessary for man's highest culture, else had not the world been so largely indebted in all times to those who have sprung from the humbler ranks. An easy and luxurious existence does not train men to effort or encounter with difficulty; nor does it awaken that consciousness of power which is so necessary for energetic and effective action in life. Indeed, so far from poverty being a misfortune, it may, by vigorous self-help, be converted even into a blessing; rousing a man to that struggle with the world in which, though some may purchase ease by degradation, the right-minded and true-hearted will find strength, confidence, and triumph. Bacon says, "Men seem neither to understand their riches nor their strength: of the former they believe greater things than they should; of the latter much less. Self-reliance and self-denial will teach a man to drink out of his own cistern, and eat his own sweet bread, and to learn and labour truly to get his living, and carefully to expend the good things committed to his trust."

Riches are so great a temptation to ease and self-indulgence, to which men are by nature prone, that the glory is all the greater of those who, born to ample fortunes, nevertheless take an active part in the work of their generation—who "scorn delights and live laborious days." It is to the honour of the wealthier ranks in this country that they are not idlers; for they do their fair share of the work of the state, and usually take more than their fair share of its dangers. It was a fine thing said of a subaltern officer in the Peninsular campaigns, observed trudging along through mud and mire by the side of his regiment, "There goes 15,000*l.* a-year!" and in our own day, the bleak slopes of Sebastopol and the burning soil of India have borne witness to the like noble self-denial and devotion on the part of our gentler classes; many a gallant and noble fellow, of rank and estate, having risked his

life, or lost it, in one or other of those fields of action, in the public service of his country.

Nor have the wealthier classes been undistinguished in the more peaceful pursuits of philosophy and science. Take, for instance, the great names of Bacon, the father of modern philosophy, and of Worcester, Boyle, Cavendish, Talbot, and Rosse, in science. The last named may be regarded as the great mechanic of the peerage, a man who, if he had not been born a peer, would probably have taken the highest rank as an inventor. So thorough is his knowledge of smith-work that he is said to have been pressed on one occasion to accept the foremanship of a large workshop, by a manufacturer to whom his rank was unknown. The great Rosse telescope, of his own fabrication, is certainly the most extraordinary instrument of the kind that has yet been constructed.

But it is principally in the departments of politics and literature that we find the most energetic labourers amongst our higher classes. Success in these lines of action, as in all others, can only be achieved through industry, practice, and study; and the great Minister, or parliamentary leader, must necessarily be amongst the very hardest of workers. Such are Palmerston and Derby, Russell and Disraeli, Gladstone and Bulwer. These men have had the benefit of no Ten Hours Bill, but have often, during the busy season of Parliament, worked "double shift," almost day and night. One of the most illustrious of such workers in modern times was unquestionably the late Sir Robert Peel. He possessed in an extraordinary degree the power of continuous intellectual labour, nor did he spare himself. His career, indeed, presented a remarkable example of how much a man of comparatively moderate powers can accomplish by means of assiduous application and indefatigable industry. During the forty years that he held a seat in Parliament, his labours were prodigious. He was a most conscientious man, and whatever he undertook to do, he did thoroughly. All his speeches bear evidence of his

careful study of everything that had been spoken or written on the subject under consideration. He was elaborate almost to excess; and spared no pains to adapt himself to the various capacities of his audience. Withal, he possessed much practical sagacity, great strength of purpose, and power to direct the issues of action with steady hand and eye. In one respect he surpassed most men: his principles broadened and enlarged with time; and age, instead of contracting, only served to mellow and ripen his nature. To the last he continued open to the reception of new views, and, though many thought him cautious to excess, he did not allow himself to fall into that indiscriminating admiration of the past, which is the palsy of many minds similarly educated, and renders the old age of many nothing but a pity.

The indefatigable industry of Lord Brougham has become almost proverbial. His public labours have extended over a period of upwards of sixty years, during which he has ranged over many fields—of law, literature, politics, and science—and achieved distinction in them all. How he contrived it, has been to many a mystery. Once, when Sir Samuel Romilly was requested to undertake some new work, he excused himself by saying that he had no time, “but,” he added, “go with it to that fellow Brougham, he seems to have time for everything.” The secret of it was, that he never left a minute unemployed; withal he possessed a constitution of iron. When arrived at an age at which most men would have retired from the world to enjoy their hard-earned leisure, perhaps to doze away their time in an easy chair, Lord Brougham commenced and prosecuted a series of elaborate investigations as to the laws of Light, and he submitted the results to the most scientific audiences that Paris and London could muster. About the same time, he was passing through the press his admirable sketches of the ‘Men of Science and Literature of the Reign of George III.,’ and taking his full share of the law business and the political discussions in the House of

Lords. Sydney Smith once recommended him to confine himself to only the transaction of so much business as three strong men could get through. But such was Brougham's love of work—long become a habit—that no amount of application seems to have been too great for him; and such was his love of excellence, that it has been said of him that if his station in life had been only that of a shoe-black, he would never have rested satisfied until he had become the best shoe-black in England.

Another hard-working man of the same class is Sir E. Bulwer Lytton. Few writers have done more, or achieved higher distinction in various walks—as a novelist, poet, dramatist, historian, essayist, orator, and politician. He has worked his way step by step, disdainful of ease, and animated throughout only by the ardent desire to excel. On the score of mere industry, there are few living English writers who have written so much, and none that have produced so much of high quality. The industry of Bulwer is entitled to all the greater praise that it has been entirely self-imposed. To hunt, and shoot, and live at ease,—to frequent operas, and clubs, and Almack's, enjoying the variety of London sight-seeing, morning calls, and parliamentary small-talk during the "season," and then off to the country mansion, with its well-stocked preserves, and its thousand delightful out-door pleasures,—to travel abroad, to Paris, Vienna, or Rome,—all this is excessively attractive to a lover of pleasure and a man of fortune, and by no means calculated to make him buckle to steady, continuous labour of any kind. Yet these pleasures, all within his reach, Bulwer must, as compared with men born to similar estate, have denied himself in assuming the position and pursuing the career of a literary man. Like Byron, his first effort was poetical ('Weeds and Wild Flowers'), and a failure. His second was a novel ('Falkland'), and it proved a failure too. A man of weaker stuff would have dropped authorship; but Bulwer had pluck and perseverance; and he worked on, determined to succeed.

He was incessantly industrious, read prodigiously, and from failure went courageously onwards to success. 'Pelham' followed 'Falkland' within a year, and the remainder of Bulwer's literary life, now extending over a period of thirty years, has been a succession of triumphs.

Mr. Disraeli affords a similar instance of the power of industry and application in working out an eminent public career. His first achievements were, like Bulwer's, in literature; and he reached success only through a succession of failures. His 'Wondrous Tale of Alroy' and 'Revolutionary Epic' were laughed at, and regarded as indications of literary lunacy. But he worked on in other directions, and his 'Coningsby,' 'Sybil,' and 'Tancred,' proved the sterling stuff of which he was made. As an orator too, his first appearance in the House of Commons was a failure. It was spoken of as "more screaming than an Adelphi farce." Though composed in a grand and ambitious strain, every sentence was hailed with "loud laughter." 'Hamlet' played as a comedy were nothing to it. But he concluded with a sentence which embodied a prophecy. Writhing under the laughter with which his studied eloquence had been received, he exclaimed, "I have begun several times many things, and have succeeded in them at last. I shall sit down now, but the time will come when you will hear me." The time did come; and how Disraeli succeeded in at length commanding the rapt attention of the first assembly of gentlemen in the world, affords a striking illustration of what energy and determination will do; for Disraeli earned his position by dint of patient industry. He did not, as many young men do, having once failed, retire dejected, to mope and whine in a corner, but pluckily set himself to work. He carefully unlearned his faults, studied the character of his audience, practised sedulously the art of speech, and industriously filled his mind with the elements of parliamentary knowledge. He worked patiently for success; and it came, but slowly: then the House laughed with him, instead of at him. The recol-

lection of his early failure was effaced, and by general consent he was at length admitted to be one of the most finished and effective of parliamentary speakers.

Illustrious as are the instances of strong individuality which we have thus rapidly cited, the number might be largely increased even from the list of living men. One of our most distinguished writers has, it is true, lamented the decay of that strength of individual character which has been the glory of the English nation; yet, if we mistake not, no age in our history so little justifies such a lament as the present. Never did sudden calamity more severely test the individual pluck, endurance, and energy of a people, than did the recent outbreak of the rebellion in India; but it only served to bring out the unflinching self-reliance and dormant heroism of the English race. In that terrible trial all proved almost equally great—women, civilians, and soldiers—from the general down through all grades to the private and bugleman. The men were not picked—they belonged to the same every-day people whom we daily meet at home—in the streets, in workshops, in the fields, at clubs; yet when sudden disaster fell upon them, each and all displayed a wealth of personal resources and energy, and became as it were individually heroic. Indeed in no age of England have the finest qualities of men been so brilliantly displayed; and there are perhaps no names in our history which outshine those of the modern heroes of India. Montalembert avows that they “do honour to the human race.” Citing the great names of Havelock, Nicholson, Peel, Wilson, and Neill—to which might be added that of Outram, “the Bayard of India”—he goes on to say, “it is not only such names, great beyond comparison, it is the bearing in every respect of this handful of Englishmen, surprised in the midst of peace and prosperity by the most frightful and most unforeseen of catastrophes. Not one of them shrank or trembled—all, military and civilians, young and old, generals and soldiers, resisted, fought, and perished with a coolness and intrepidity

dity which never faltered. It is in this circumstance that shines out the immense value of public education, which invites the Englishman from his youth to make use of his strength and his liberty, to associate, resist, fear nothing, be astonished at nothing, and to save himself, by his own sole exertions, from every sore strait in life."

Equally brilliant instances of individual force of character are also to be found in more peaceful and scientific walks. Is there not Livingstone, with a heroism greater than that of Xavier, penetrating the wilds of South Africa on his mission of Christian civilization; Layard, labouring for years to disinter the remains of the buried city of Babylon; Rawlinson, the decipherer of their cuneiform inscriptions; Brooke, establishing a nucleus of European enterprise and colonization amongst the piratical tribes of the Indian Ocean; Franklin, Maclure, Collinson, M'Clinck, and others, cleaving their way through storms, and ice, and darkness, to solve the problem of the north-west passage;—enterprises which, for individual daring, self-denial, energy, and heroism, are unsurpassed by those of any age or country.

CHAPTER II.

LEADERS OF INDUSTRY—INVENTORS AND PRODUCERS.

“ Rich are the diligent, who can command
Time, nature’s stock ! and could his hour-glass fall,
Would, as for seed of stars, stoop for the sand,
And, by incessant labour, gather all.”—*D’Avenant*.

ONE of the most strongly marked features of the English people is their indomitable spirit of industry, standing out prominent and distinct in all their past history, and as strikingly characteristic of them now as at any former period. It is this spirit, displayed by the commons of England, which has laid the foundations and built up the industrial greatness of the empire, at home and in the colonies. This vigorous growth of the nation has been mainly the result of the free industrial energy of individuals ; and it has been contingent upon the number of hands and minds from time to time actively employed within it, whether as cultivators of the soil, producers of articles of utility, contrivers of tools and machines, writers of books, or creators of works of art. And while this spirit of active industry has been the vital principle of the nation, it has also been its saving and remedial one, counter-acting from time to time the effects of errors in our laws and imperfections in our constitution.

The career of industry which the nation has pursued, has also proved its best education. As steady application to work is the healthiest training for every individual, so is it the best discipline of a state. Honourable industry always travels the same road with enjoyment and duty ; and pro-

gress is altogether impossible without it. The idle pass through life leaving as little trace of their existence as foam upon the water or smoke upon the air; whereas the industrious stamp their character upon their age, and influence not only their own but all succeeding generations. Labour is the best test of the energies of men, and furnishes an admirable training for practical wisdom. Nor is a life of manual employment incompatible with high mental culture. Hugh Miller, than whom none knew better the strength and the weakness belonging to the lot of labour, stated the result of his experience to be, that Work, even the hardest, is full of pleasure and materials for self-improvement. He held honest labour to be the best of teachers, and that the school of toil is the noblest of schools—save only the Christian one,—that it is a school in which the ability of being useful is imparted, the spirit of independence learnt, and the habit of persevering effort acquired. He was even of opinion that the training of the mechanic, by the exercise which it gives to his observant faculties, from his daily dealing with things actual and practical, and the close experience of life which he acquires, better fits him for picking his way through the journey of life, and is more favourable to his growth as a Man, emphatically speaking, than the training afforded by any other condition.

The array of great names which we have already cursorily cited, of men springing from the ranks of the industrial classes, who have achieved distinction in various walks of life—in science, commerce, literature, and art—shows that at all events the difficulties interposed by poverty and labour are not insurmountable. As respects the great contrivances and inventions which have conferred so much power and wealth upon the nation, it is unquestionable that for the greater part of them we have been mainly indebted to men of the very humblest rank. Deduct what they have done in this particular line of action, and it will be found that very little indeed remains

for other men to have accomplished. The names of many meritorious inventors have been forgotten ; only the more distinguished—men who have marked an epoch in the history of invention—have been remembered ; such, for instance, as those connected with the development of the gigantic powers of the steam-engine. Yet there are hundreds of ingenious but nameless workmen, who have from time to time added substantial improvements to that wonderful machine, and contributed greatly to the increase of its powers and the extension of its practical uses. There are, also, numerous minor inventions—such, for instance, as the watch which we carry in our pocket—each important in its way, the history of which has been altogether lost ; and though we have succeeded to the ample inheritance which the inventors have bequeathed to us, we know not the names of many of our benefactors.

Though the invention of the working steam-engine—the king of machines—belongs, comparatively speaking, to our own epoch, the idea of it was born many centuries ago. Like other contrivances and discoveries, it was effected step by step—one man transmitting the result of his labours, at the time apparently useless, to his successors, who took it up and carried it forward another stage,—the sentinels of the great idea answering each other across the heads of many generations. The idea promulgated by Hero of Alexandria was never altogether lost ; but, like the grain of wheat hid in the hand of the Egyptian mummy, it sprouted and grew vigorously when brought into the full light of modern science. The steam-engine was nothing, however, until it emerged from the state of theory, and was taken in hand by practical mechanics ; and what a noble story of patient, laborious investigation, of difficulties encountered and overcome by heroic industry, does not that marvellous machine tell of ! It is, indeed, in itself, a monument of the power of self-help in man. Grouped around it we find Savary, the Cornish miner ; Newcomen, the Dartmouth blacksmith ; Cawley, the glazier ; Potter, the engine-boy ;

Smeaton, the engineer ; and, towering above all, the laborious, patient, never-tiring James Watt, the mathematical instrument maker.

Watt was one of the most industrious of men. Whatever subject came under his notice in the course of his business, immediately became to him an object of study ; and the story of his life proves, what all experience confirms, that it is not the man of the greatest natural vigour and capacity who achieves the highest results, but he who employs his powers with the greatest industry and the most carefully disciplined skill—the skill that comes by labour, application, and experience. Many men in his time knew far more than Watt, but none laboured so assiduously as he did to turn all that he did know to useful practical purposes. He was, above all things, most persevering in his pursuit of facts. He cultivated carefully that habit of active attention on which all the higher working qualities of the mind mainly depend. Indeed, Mr. Edgworth entertained the opinion, that many of the great differences of intellect which are found in men depend more upon the early cultivation of this *habit of attention*, than upon any great disparity between the powers of one individual and another.

Even when a boy, Watt found science in his toys. The quadrants lying about his father's carpenter's shop led him to the study of optics and astronomy ; his ill health induced him to pry into the secrets of physiology ; and his solitary walks through the country attracted him to the study of botany, history, and antiquarianism. While carrying on the business of a mathematical instrument maker, he received an order to build an organ ; and, though without any ear for music, he undertook the study of harmonics, and successfully constructed the instrument. And, in like manner, when the little model of Newcomen's steam-engine, belonging to the University of Glasgow, was placed in his hands for repair, he forthwith set himself to learn all that was then known about heat, evaporation, and condensation,

—at the same time plodding his way in mechanics and the science of construction,—the results of which he at length embodied in the condensing steam-engine.

For ten years he went on contriving and inventing—with little hope to cheer him—with few friends to encourage him—struggling with difficulties, and earning but a slender living at his trade. Even when he had brought his engine into a practicable working condition, his difficulties seemed to be as far from an end as ever; and he could find no capitalist to join him in his great undertaking, and bring the invention to a successful practical issue. He went on, meanwhile, earning bread for his family by making and selling quadrants, making and mending fiddles, flutes, and other musical instruments; measuring mason work, surveying roads, superintending the construction of canals, or doing anything that turned up, and offered a prospect of honest gain. At length, Watt found a fit partner in another eminent leader of industry—Mathew Boulton, of Birmingham; a skilful, energetic, and far-seeing man, who vigorously undertook the enterprise of introducing the condensing engine into general use as a working power; and the success of both is now matter of history.

A succession of eminent workmen have, from time to time, added new power to the steam-engine; and, by numerous modifications, rendered it capable of being applied to nearly all the purposes of manufacture—driving machinery, impelling ships, grinding corn, printing books, stamping money, hammering, planing, and turning iron; in short, of performing any description of mechanical labour where power is required. One of the most useful modifications in the engine was that devised by Trevithick, another Cornish miner, and eventually perfected by George Stephenson, the colliery engine-man, in the invention of the railway locomotive, by which social changes of immense importance have been brought about, of even greater consequence, considered in their results on human progress and civilization, than the condensing-engine of Watt.

These successive advances, however, have not been the result of the genius of any one inventor; but of the continuous and successive industry and inventiveness of many generations. What Mr. Robert Stephenson recently said of the locomotive, at a meeting of engineers at Newcastle, is true of nearly every other capital invention: "It is due," he said, "not to one man, but to the efforts of a nation of mechanical engineers."

One of the first grand results of Watt's invention,—which placed an almost unlimited power at the command of the producing classes,—was the establishment of the cotton manufacture of Great Britain. The person most closely identified with the foundation of this great branch of industry was unquestionably Sir Richard Arkwright, whose practical energy and sagacity were perhaps even more remarkable than his mechanical inventiveness. His originality as an inventor has indeed been called in question, like that of Watt and Stephenson. Arkwright probably stood in the same relation to the spinning-machine that Watt did to the steam-engine and Stephenson to the locomotive. He gathered together the scattered threads of ingenuity which already existed, and wove them, after his own design, into a new and original fabric. Though Lewis Paul, of Birmingham, patented the invention of spinning by rollers thirty years before Arkwright, the machines constructed by him were so imperfect in their details, that they could not be profitably worked; and, therefore, the invention was practically a failure. Another obscure mechanic, a reed-maker of Leigh, named Thomas Highs, is also said to have invented the water-frame and spinning-jenny; but they, too, proved unsuccessful for the same reason. When the demands of industry are found to press upon the resources of inventors, you will generally find the same idea floating about in many minds;—such has been the case with the steam-engine, the safety-lamp, the electric telegraph, and many other inventions. Many ingenious minds labour in the throes of invention,

until at length the master mind, the strong practical man, steps forward, and straightway delivers them of their idea, applies the principle successfully, and the thing is done. Then there is a loud outcry amongst all the smaller contrivers, who see themselves distanced in the race; and hence men such as Watt, Stephenson, and Arkwright, have so often to defend their reputation and their rights as practical and successful inventors.

Richard Arkwright, like most of our great mechanics, sprang from the ranks. He was born in Preston in 1732. His parents were very poor, and he was the youngest of thirteen children. He was never at school; the only education he received he gave to himself; and to the last he was only able to write with difficulty. When a boy, he was apprenticed to a barber, and after learning the business, he set up for himself in Bolton in 1760, occupying an underground cellar, over which he put up the sign, "Come to the subterraneous barber—he shaves for a penny." The other barbers found their customers leaving them, and reduced their prices to his standard: when Arkwright, determined to push his trade, announced his determination to give "A clean shave for a halfpenny." After a few years he quitted his cellar, and became an itinerant dealer in hair. At that time wigs were worn, and this was an important branch of the barbering business. He went about buying hair, and was accustomed to attend the hiring fairs throughout Lancashire resorted to by young women, for the purpose of securing their long tresses; and it is said that in negotiations of this sort he was very successful. He also dealt in a chemical hair dye, which he used adroitly, and thereby secured a considerable trade. Being of a mechanical turn, he devoted a good deal of his spare time to contriving models of machines, and, like many self-taught men of the same bias, he endeavoured to invent perpetual motion. He followed his experiments so devotedly that he neglected his business, lost the little money he had saved, and was reduced to great poverty. His wife—for he

had by this time married—was impatient at what she conceived to be a wanton waste of time and money, and in a moment of sudden wrath she seized upon and destroyed his models, hoping thus to remove the cause of the family privations. Arkwright was a stubborn and enthusiastic man, and he was provoked beyond measure by this conduct of his wife, which he never forgave ; and he, in consequence, separated from her.

In travelling about the country, Arkwright had become acquainted with a person named Kay, a clockmaker at Warrington, who assisted him in constructing some of the parts of his perpetual-motion machinery. It is supposed that he was first informed by Kay of the principle of spinning by rollers. The idea at once took firm possession of his mind, and he proceeded to devise the process by which it was to be accomplished, Kay being able to tell him nothing on this point. Arkwright now abandoned his business of hair collecting, and devoted himself to the perfecting of his machine, a model of which, constructed by Kay under his directions, he set up in the parlour of the Free Grammar School at Preston. Being a burgess of the town, he voted at the contested election at which General Burgoyne was returned ; but such was his poverty, and such the tattered state of his dress, that a number of persons subscribed a sum sufficient to have him put in a state fit to appear in the poll-room. The exhibition of his machine in a town where so many work-people lived by the exercise of manual labour proved a dangerous experiment ; there were ominous growlings heard outside from time to time, and Arkwright,—remembering the fate of poor Hargreaves' spinning-jenny, which had been pulled to pieces only a short time before by a Blackburn mob,—wisely determined on packing up his model and removing to a less dangerous locality. He went accordingly to Nottingham, where he applied to some of the local bankers for pecuniary assistance ; and the Messrs. Wright consented to advance him a sum of money on condition of sharing in

the profits of the invention. The machine, however, not being perfected so soon as they had anticipated, the bankers recommended Arkwright to apply to Messrs. Strutt and Need, the former of whom was the ingenious inventor and patentee of the stocking-frame. Mr. Strutt was quick to perceive the merits of the invention, and a partnership was entered into with Arkwright, whose road to fortune was now clear. The patent was secured in the name of "Richard Arkwright, of Nottingham, clockmaker," and it is a remarkable fact, that it was taken out in 1769, the very same year in which Watt secured the patent for his steam-engine. A cotton-mill was first erected at Nottingham, driven by horses; and another was shortly after built, on a much larger scale, at Cromford, in Derbyshire, turned by a water-wheel, from which circumstance the spinning-machine came to be called the water-frame.

Arkwright's labours, however, were, comparatively speaking, only begun. He had still to perfect all the working details of his machine. It was in his hands the subject of constant modification and improvement, until eventually it was rendered practicable and profitable in an eminent degree. But success was only secured by long and patient labour: for some years, indeed, the speculation was disheartening and unprofitable, swallowing up a very large amount of capital without any result. When success began to appear more certain, then the Lancashire manufacturers fell upon Arkwright's patent to pull it in pieces, as the Cornish miners fell upon Boulton and Watt, to rob them of the profits of their steam-engine. Arkwright was even denounced as the enemy of the working people; and a mill which he built near Chorley was destroyed by a mob in the presence of a strong force of police and military. The Lancashire men refused to buy his materials, though they were confessedly the best in the market. Then they refused to pay patent-right for the use of his machines, and combined to crush him in the courts of law. To the disgust of right-minded people, Arkwright's patent was upset.

But though beaten, he was not subdued. He established large mills in other parts of Lancashire, in Derbyshire, and at New Lanark, in Scotland. The mills at Cromford also came into his own hands at the expiring of his partnership with Strutt, and the amount and the excellence of his products were such, that in a short time he obtained so complete a control of the trade, that the prices were fixed by him, and he governed the main operations of the other cotton-spinners.

Arkwright was a tremendous worker, and a man of marvellous energy, ardour, and application in business. At one period of his life he was usually engaged in the severe and continuous labours involved by the organization and conduct of his numerous manufactories from four in the morning until nine at night. At fifty years of age he set to work to learn English grammar, and improve himself in writing and orthography. When he travelled, to save time, he went at great speed, drawn by four horses. Be it for good or for evil, Arkwright was the founder in England of the modern factory system, a branch of industry which has unquestionably proved a source of immense wealth to individuals and to the nation.

It is not every inventor, however skilled, who is a veritable Leader of Industry like Arkwright. Many distinguished inventors are found comparatively helpless in the conduct of business, which demands the exercise of different qualities,—the power of organizing the labour of large numbers of men, promptitude of action on emergencies, and sagacious dealing with the practical affairs of life. Thus Watt hated that jostling with the world, and contact with men of many classes, which are usually encountered in the conduct of any extensive industrial operation. He declared that he would rather face a loaded cannon than settle an account or make a bargain; and there is every probability that he would have derived no pecuniary advantage whatever from his great invention, or been able to defend it against the repeated attacks of the

mechanical pirates who fell upon him in Cornwall, London, and Lancashire, had he not been so fortunate as to meet at the great crisis of his career, with the illustrious Matthew Boulton, "the father of Birmingham."

Boulton was a man of essentially different qualities from Watt, but quite as able in his own way. He was one of the first of the great manufacturing potentates now so numerous in the northern and midland counties. Boulton's commencement in life was humble: his position being only that of a Birmingham button-maker. In his case, as in every other, it was not the calling that elevated the man, but the man that elevated the calling. He was gifted by nature with fine endowments, which he cultivated to the utmost. He possessed a genius for business of the highest order; being of sound understanding and quick perception, and prompt to carry out the measures which his judgment approved. Hence he rarely, if ever, failed; for his various enterprises, bold though they were, were always guided by prudence. He was not a man to drive a wedge the broad end foremost; because he possessed an admirable tact, polished by experience, which enabled him unerringly to determine when and how to act. He actively conducted his business, and never allowed himself to be driven by it. He threw into his daily labours his individual uprightness and integrity—qualities which are the glory of every man's character, whatever his position in life may be. And although he prospered and became rich, according to his deserts, it might be said of him with truth, that there was not a dirty shilling in all that he earned.

Beside being great as a man of business, Boulton was a highly-cultivated man of science, a generous patron of art, and a diligent cultivator of literature; but the chief aim and labour of his life was the practical introduction of Watt's steam-engine as the great working power of England. With pride he said to Boswell, when visiting Soho, "I sell here, sir, what all the world desires to have—POWER." "He had," continues Boswell, "about 700 people at work:

I contemplated him as an iron chieftain; and he seemed to be a father of his tribe." Mrs. Schimmel Penninck characterizes him as a man of noble, open, and cordial manners, and of princely munificence; "he went among his people," she says, "like a monarch bestowing largess." He was a true lord and leader of industry. Every step in his career was won by honest work and valiant effort. No envy follows the career of such a man; but praise, reward, and blessings. When he died, he was followed to the grave by the entire body of his workmen, and there was scarcely a dry eye amongst them.

All other great branches of industry in Britain furnish equally illustrious examples of energetic men of business, who have been the source of untold benefits to the neighbourhoods in which they have laboured, and of greatly increased power and wealth to the community at large. Amongst such might be cited the Strutts of Belper; the Tennants of Glasgow; the Marshalls and Gotts of Leeds; the Peels, Ashworths, Birleys, Fieldens, Ashtons, Heywoods, and Ainsworths of South Lancashire. For the present, however, we shall confine ourselves to a single family, since become eminently distinguished in connection with the political history of England: we refer to the Peels of South Lancashire.

The founder of the Peel family, about the middle of last century, was a small yeoman, occupying the Hole House Farm, near Blackburn, from which he afterwards removed to a house situated in Fish Lane in that town. Robert Peel, as he advanced in life, saw a large family of sons and daughters growing up about him; but the land about Blackburn being somewhat barren, it did not appear to him that agricultural pursuits offered a very encouraging prospect for their industry. The place had, however, long been the seat of a domestic manufacture—the fabric called "Blackburn greys," consisting of linen weft and cotton warp, being chiefly made in that town and its neighbourhood. It was then customary—previous to the introduction of the factory

system—for industrious yeomen with families to employ the time not occupied in the fields in weaving at home; and Robert Peel accordingly began the domestic trade of calico-making. He was honest, and made an honest article; thrifty and hard-working; and his trade prospered. He was also enterprising, and was one of the first to adopt the carding cylinder, then recently invented.

But Robert Peel's attention was principally directed to the *printing* of calico—then a comparatively unknown art—and for some time he carried on a series of experiments with the object of printing by machinery. The experiments were secretly conducted in his own house, the cloth being ironed for the purpose by one of the women of the family. It was then customary, in such houses as the Peels, to use pewter plates at dinner. Having sketched a figure or pattern on one of the plates, the thought struck him that an impression might be got from it in reverse, and printed on calico with colour. In a cottage at the end of the farm-house lived a woman who kept a calendering machine, and going into her cottage, he put the plate with colour rubbed into the figured part and some calico over it, through the machine, when it was found to leave a satisfactory impression. Such is said to have been the origin of roller printing on calico. Robert Peel shortly perfected his process, and the first pattern he brought out was a parsley leaf; hence he is spoken of in the neighbourhood of Blackburn to this day as “Parsley Peel.” The process of calico printing by what is called the mule machine—that is, by means of a wooden cylinder in relief, with an engraved copper cylinder—was afterwards brought to perfection by one of his sons, the head of the firm of Messrs. Peel and Co., of Church. Stimulated by his success, Robert Peel shortly gave up farming, and removing to Brookside, a village about two miles from Blackburn, he devoted himself exclusively to the printing business. There, with the aid of his sons, who were as energetic as himself, he successfully carried on the trade for several

years; and as the young men grew up towards manhood, the concern branched out into various firms of Peels, each of which became a centre of industrial progress and remunerative employment to large numbers of people.

From all that can now be learnt of the character of the original and untitled Robert Peel, he must have been a remarkable man—shrewd, sagacious, and far-seeing. But very little is known of him excepting from tradition, and the sons of those who knew him are fast passing away. It is not the lives of such men that are usually recorded in books. The men who “say good things” have always a better chance of being remembered in literature than those who do them. Men who write a play, or a book of poetry, will secure a biography, where men who establish new branches of industry, or give a fresh impulse to society in connection with invention and production, are shortly forgotten. Nevertheless, the works of such public benefactors live after them, and their beneficent example is reproduced in the action and character of their successors. His son, Sir Robert, the first baronet, thus modestly spoke of his father, the founder of the family:—“He moved in a confined sphere, and employed his talents in improving the cotton trade. He had neither the wish nor opportunity of making himself acquainted with his native country, or society far removed from his native county of Lancaster. I lived under his roof till I attained the age of manhood, and had many opportunities of discovering that he possessed, in an eminent degree, a mechanical genius and a good heart. He had many sons, and placed them all in situations where they might be useful to each other. The cotton trade was preferred as best calculated to secure this object; and by habits of industry, and imparting to his offspring an intimate knowledge of the various branches of the cotton manufacture, he lived to see his children connected together in business, and, by their successful exertions, become, without one exception, opulent and happy. My father may be truly said to have been the

founder of our family; and he so accurately appreciated the importance of commercial wealth in a national point of view, that he was often heard to say that the gains to individuals were small compared with the national gains arising from trade."

Sir Robert Peel, the first baronet and the second manufacturer of the name, inherited all his father's enterprize, ability, and industry. His position, at starting in life, was little above that of an ordinary working man; for his father, though laying the foundations of future prosperity, was still struggling with the difficulties arising from insufficient capital. When Robert was only twenty years of age, he determined to begin the business of cotton printing, which he had by this time learnt with his father, on his own account. His uncle, James Haworth, and William Yates of Blackburn, joined him in his enterprize; the whole capital which they could raise amongst them amounting to only about 500*l.*, the principal part of which was supplied by William Yates. His father was a householder in Blackburn, where he was well known and much respected; and having saved money by his business, he was willing to advance sufficient to give his son a start in the lucrative trade of cotton-printing, then in its infancy. Robert Peel, though comparatively a mere youth, supplied the practical knowledge of the business; but it was said of him, and proved true, that he "carried an old head on young shoulders." A ruined corn-mill, with its adjoining fields, was purchased for a comparatively small sum, near the then insignificant town of Bury, where the works long after continued to be known as "The Ground;" and a few wooden sheds having been run up, the firm commenced their cotton-printing business in a very humble way in the year 1770, adding to it that of cotton-spinning a few years later. The frugal style in which the partners lived may be inferred from the following incident in their early career. William Yates, being a married man with a family, commenced housekeeping on a small

scale, and to oblige Peel, who was single, he agreed to take him as a lodger. The sum which the latter first paid for board and lodging was only 8s. a week; but Yates, considering this too little, insisted on the weekly payment being increased a shilling, to which Peel at first demurred, and a difference between the partners took place, which was eventually compromised by the lodger paying an advance of sixpence a week. William Yates's eldest child was a girl named Ellen, and she very soon became an especial favourite with the young lodger. On returning from his hard day's work at "The Ground," he would take the little girl upon his knee, and say to her, "Nelly, thou bonny little dear, wilt be my wife?" to which the child would readily answer "Yes," as any child would do. "Then I'll wait for thee, Nelly; I'll wed thee, and none else." And Robert Peel did wait. As the girl grew in beauty towards womanhood, his determination to wait for her was strengthened; and after the lapse of ten years—years of close application to business and rapidly increasing prosperity—Robert Peel married Ellen Yates when she had completed her seventeenth year; and the pretty child, whom her mother's lodger and father's partner had nursed upon his knee, became Mrs. Peel, and eventually Lady Peel, the mother of the future Prime Minister of England. Lady Peel was a noble and beautiful woman, fitted to grace any station in life. She possessed rare powers of mind, and was, on every emergency, the high-souled and faithful counsellor of her husband. For many years after their marriage, she acted as his amanuensis, conducting the principal part of his business correspondence, for Mr. Peel himself was an indifferent and almost unintelligible writer. She died in 1803, only three years after the Baronetcy had been conferred upon her husband. It is said that London fashionable life—so unlike what she had been accustomed to at home—proved injurious to her health; and old Mr. Yates afterwards used to say, "if Robert hadn't made our Nelly a 'Lady,' she might ha' been living yet."

The career of Peel, Yates, & Co., was throughout one of great and uninterrupted prosperity. Sir Robert Peel himself was the soul of the firm; to great energy and application uniting much practical sagacity, and first-rate mercantile abilities—qualities in which many of the early cotton-spinners were exceedingly deficient. He was a man of iron mind and frame, and toiled unceasingly. In short, he was to cotton-printing what Arkwright was to cotton-spinning, and his success was equally great. The excellence of the articles produced by the firm secured the command of the market, and the character of the firm stood pre-eminent in Lancashire. Besides greatly benefiting Bury, the partnership planted similar extensive works in the neighbourhood, on the Irwell and the Roch; and it was cited to their honour, that, whilst they sought to raise to the highest perfection the quality of their manufactures, they also endeavoured, in all ways, to promote the well-being and comfort of their work-people. Even in the most unfavourable times, their “hands” never wanted work. Sir Robert Peel was quick to appreciate the value of all new processes and inventions; in illustration of which we may allude to his adoption of the process for producing what is called *resist work* in calico printing. This is accomplished by the use of a paste, or resist, on such parts of the cloth as are intended to remain white. The person who discovered the paste was a traveller for a London house, who sold it to Mr. Peel for an inconsiderable sum. It required the experience of a year or two to perfect the system and make it practically useful; but the beauty of its effect, and the extreme precision of outline in the pattern produced, at once placed the Bury establishment at the head of all the factories for calico printing in the country. Other firms, conducted with similar spirit, were established by members of the same family at Burnley, Foxhill-bank, and Altham, in Lancashire; Salley Abbey, in Yorkshire; and afterwards at Burton-on-Trent, in Staffordshire; these various establishments, whilst they

brought immense wealth to the proprietors, setting an example to the whole cotton trade, and training up many of the most successful printers and manufacturers in Lancashire.

That the force and development of a country depends mainly upon the industry and energy of its individual men, cannot be better illustrated than by the career of another distinguished workman, Josiah Wedgwood, the founder of the Staffordshire Potteries. His father was a poor potter at Burslem, barely able to make a living at his trade. He died when Josiah was only eleven years old, and at that early age he began to work as a thrower at his elder brother's wheel. The boy never received any school education worthy of the name, and all the culture which he afterwards received, he obtained for himself. About the time when the boy began to work at the potter's wheel, the manufacture of earthenware could scarcely be said to exist in England. What was produced was altogether unequal to the supply of our domestic wants, and large quantities of the commoner sort of ware were imported from abroad,—principally from Delft, in Holland, whence it was usually known by the name of "Delft ware." Porcelain for the rich was chiefly imported from China, and sold at a very high price. No porcelain capable of resisting a scratch with a hard point had as yet been made in this country. The articles of earthenware produced in Staffordshire were of the coarsest quality, and were for the most part hawked about by the workmen themselves and their families, or by pedlars, who carried their stocks upon their backs.

Whilst working with his brother as a thrower, Wedgwood caught the small pox, then a most malignant disease; he was thrown into ill health, and the remains of the disease seem to have settled in his left leg, so that he was under the necessity of having it amputated, which compelled him to relinquish the potter's wheel. Some time after this we find him at Stoke, in partnership with a

man named Harrison, as poor as himself—in fact both were as yet but in the condition of common workmen. Wedgwood's taste for ornamental pottery, however, already began to display itself; and, leaving Harrison, we then find him joined to another workman named Whieldon, making earthenware knife-handles in imitation of agate and tortoiseshell, melon table-plates, green pickle-leaves, and such like articles. Whieldon being unwilling to pursue this fanciful branch of trade, Wedgwood left him and returned to Burslem, where he set up for himself in a small thatched house, and went on with the production of his articles of taste. He worked away industriously, employed a few hands under him, and gradually prospered. He was a close inquirer and an accurate observer in his peculiar line of business; and among other facts which came under his notice, was this important one—that an earth containing silica, which was black before calcination, became white after exposure to the heat of a furnace. This fact, observed and pondered over, led to the idea of mixing silica with the red powder of the potteries, and to the discovery that the mixture becomes white when calcined. He had but to cover this material with a vitrification of transparent glaze, to obtain one of the most important products of fictile art—that which, under the name of English earthenware, was to attain the greatest commercial value, and to become of the most extensive utility.

Wedgwood now took new premises, and began to manufacture white stone-ware on a large scale, and afterwards cream-coloured ware, which acquired great celebrity. The improvement of pottery became his passion, and was never lost sight of for a moment. Whatever he undertook to do he worked at with all his might, animated by the determination to excel. He now devoted himself to patient chemical investigation, and as his means increased, he spared neither labour nor expense in pursuing his improvements. He sought the society of men of science, art, and learning; and gleaned something valuable from them all.

Even when he had acquired a competency he went forward perfecting his manufacture, until, his example extending in all directions, the industry of the entire district was stimulated, and a great branch of British industry was eventually established on firm foundations. He was cheerfully assisted in his objects by persons of rank and influence; for, working in the truest spirit, he readily commanded the help and encouragement of all true workers. He made for Queen Charlotte the first royal table-service of English manufacture, of the kind afterwards called "Queen's-ware," and was forthwith appointed her Royal Potter, a title which Wedgwood more prized than if he had been created a baron. Valuable sets of porcelain were entrusted to him for imitation, in which he succeeded to admiration. Sir William Hamilton lent him specimens of ancient art from Herculaneum, of which Wedgwood's ingenious workmen produced the most accurate and beautiful copies. The Duchess of Portland outbid him for the Barberini Vase when that article was offered for sale; he bid as high as seventeen hundred guineas for it, but her grace secured it for the sum of eighteen hundred guineas; but when she learnt Wedgwood's object she at once generously lent him the vase to copy. He produced fifty copies at a cost of about 2500*l.*, and his expenses were not covered by their sale; but he gained his object, which was to show that whatever had been done, that English skill and energy could and would accomplish.

Wedgwood called to his aid the crucible of the chemist, the knowledge of the antiquary, and the skill of the artist. He found out Flaxman when a youth, and while he liberally nurtured his genius drew from him a large number of beautiful designs for his pottery and porcelain; converting them by his manufacture into objects of taste and excellence, and thus making them instrumental in the diffusion of classical art amongst the people. By careful experiment and study he was even enabled to rediscover the art of painting on porcelain or earthenware vases and similar

articals—an art practised by the ancient Etruscans, but which had been lost since the time of Pliny. He distinguished himself by his own contributions to science, and his name is still identified with the pyrometer which he invented. He was an indefatigable supporter of all measures of public utility; and the construction of the Trent and Mersey Canal, which completed the navigable communication between the eastern and western sides of the island, was mainly due to his public-spirited exertions allied to the engineering skill of Brindley. The road accommodation of the district being of an execrable character, he planned and executed a turnpike-road through the Potteries, ten miles in length. The reputation he achieved was such that his works at Burslem, and subsequently those at Etruria, which he founded and built, became a point of attraction to distinguished visitors from all parts of Europe.

The result of Wedgwood's labours was, that the manufacture of pottery, which he found in the very lowest condition, became one of the staples of England; and instead of importing what we needed for home use from abroad, we became large exporters to other countries, supplying them with earthenware even in the face of enormous prohibitory duties on articles of British produce. Wedgwood gave evidence as to his manufactures before Parliament in 1785, only some thirty years after he had begun his operations; from which it appeared, that from providing only casual employment to a small number of inefficient and badly remunerated workmen, there were then about 20,000 persons deriving their bread directly from the manufacture of earthenware, without taking into account the increased numbers to which it gave employment in coal-mines, and in the carrying trade by land and sea, and the stimulus which it gave to employment in many ways in various parts of the country. Yet, important as had been the advances made in his time, Mr. Wedgwood was of opinion that the manufacture was but in its infancy, and that the

improvements which he had effected were of but small amount compared with those to which the art was capable of attaining, through the continued industry and growing intelligence of the manufacturers, and the natural facilities and political advantages enjoyed by Great Britain; an opinion which has been fully borne out by the progress which has since been effected in this important branch of industry.

Not to speak of Spode, Davenport, Ridgway, and others equally distinguished, we may briefly notice the late Mr. Herbert Minton as actively taking up the work at the stage at which Wedgwood left it, carrying the manufacture on to new triumphs, and greatly extending this branch of industry. Mr. Minton was not so much a highly educated man, nor an economist, nor inventor, as characterized by the inexhaustible activity and ceaseless energy which he brought to bear upon the creation of a colossal business, employing some 1500 skilled artizans. He possessed a clear head, a strong body, rare powers of observation, and great endurance; he was, besides, possessed by that pride and love of his calling without which so much perseverance and devotion to it could scarcely have been looked for. Withal he was kindly and genial, commanding hosts of friends and co-operators; his rivals themselves regarding him with admiration, and looking up to him as the prince of his order. Like Wedgwood, he employed first-rate artists—painters in enamel, sculptors, designers of flowers and figures—and sparing neither pains nor expense in securing the best workmen, whether English or foreign. The talents of the men employed by him were carefully discriminated and duly recognised, and merit felt stimulated by the hope of promotion and reward. The result soon was that articles of taste, which had formerly been of altogether exceptional production, became objects of ordinary supply and demand; and objects of great artistic beauty, the designs of which were supplied by the best artists, were placed within reach of persons of moderate

means. The quality of the articles manufactured at his works became so proverbial, that one day when Pickford's carrier rudely delivered a package from his cart at the hall-door of an exhibition of ceramic manufactures, and the officer in waiting expostulated with the man on his incautious handling of the package, his ready answer was :—" Oh, never fear, Sir ; it's Minton's, it won't break."

It is not a little remarkable that Mr. Minton, by his unaided energy and enterprise, and at his own risk, was enabled successfully to compete with the Sèvres manufactures of France, which are produced by the co-operation of a large number of talented men, and the assistance of almost unlimited state funds. In many of the articles exhibited at Paris in 1855, Mr. Minton's even excelled those of similar character produced at the Imperial manufactory. In hard porcelain also, he outvied the best specimens of Meissen and Berlin ware ; in Parian, he was only approached by Copeland ; whilst in the manufacture of encaustic tiles he stood without a rival. In perfecting these several branches Mr. Minton had many difficulties to encounter and failures to surmount, but with true English energy and determination to succeed, he surmounted them all, and at length left even the best of the ancient tiles far behind. Like Wedgwood, he elevated the public taste, introduced beautiful objects of art into the homes of the people, and by founding new branches of industry, mainly by his energy and ability, he nobly earned the claim to be regarded as a great national benefactor.

Men such as these are fairly entitled to rank among the heroes of England. Their patient self-reliance amidst trials and difficulties, their courage and perseverance in the pursuit of worthy aims and purposes, are no less heroic of their kind than the bravery and devotion of the soldier and the sailor, whose duty and whose pride it is heroically to defend what these valiant leaders of industry have as heroically achieved.

CHAPTER III.

APPLICATION AND PERSEVERANCE.

“ See first that the design is wise and just ;
That ascertained, pursue it resolutely.
Do not for one repulse forego the purpose
That you resolved to effect.”

“ Allez en avant, et la foi vous viendra ! ”—*D'Alembert.*

Loft wägen — in — dann wagen
Holtke

THE greatest results in life are usually attained by simple means, and the exercise of ordinary qualities. The common life of every day, with its cares, necessities, and duties, affords ample opportunity for acquiring experience of the best kind ; and its most beaten paths provide the true worker with abundant scope for effort and room for self-improvement. The great high-road of human welfare lies along the old highway of steadfast well-doing ; and they who are the most persistent, and work in the truest spirit, will invariably be the most successful.

Fortune has often been blamed for her blindness ; but fortune is not so blind as men are. Those who look into practical life will find that fortune is usually on the side of the industrious, as the winds and waves are on the side of the best navigators. Success treads on the heels of every right effort ; and though it is possible to over-estimate success to the extent of almost deifying it, as is sometimes done, still, in any worthy pursuit, it is meritorious. Nor are the qualities necessary to ensure success at all extraordinary. They may, for the most part, be summed up in these two—common sense and perseverance. Genius may not be necessary, though even genius of the highest sort does not

despise the exercise of these common qualities. The very greatest men have been among the least believers in the power of genius, and as worldly wise and persevering as successful men of the commoner sort. Some have even defined genius to be only common sense intensified. A distinguished teacher and president of a college spoke of it as the power of making efforts. John Foster held it to be the power of lighting one's own fire. Buffon said of genius—It is patience.

Newton's was unquestionably a mind of the very highest order, and yet, when asked by what means he had worked out his extraordinary discoveries, he modestly answered, "By always thinking unto them." At another time he thus expressed his method of study: "I keep the subject continually before me, and wait till the first dawnings open slowly by little and little into a full and clear light." It was in Newton's case, as it is in every other, only by diligent application and perseverance that his great reputation was achieved. Even his recreation consisted merely in a variety in his industry—leaving one subject only to take up another. To Dr. Bentley he said: "If I have done the public any service, it is due to nothing but industry and patient thought." So Kepler, another great philosopher, speaking of his studies and his progress, said: "As in Virgil, '*Fama mobilitate viget, vires acquirit eundo,*' so it was with me, that the diligent thought on these things was the occasion of still further thinking; until at last I brooded with the whole energy of my mind upon the subject."

The extraordinary results effected by dint of sheer industry and perseverance, have led many distinguished men to doubt whether the gift of genius be so exceptional an endowment as it is generally supposed to be. Thus Voltaire held that it is only a very slight line of separation that divides the man of genius from the man of ordinary mould. Beccaria was even of opinion that all men might be poets and orators, and Reynolds that they might be

painters and sculptors. If this were really so, that stolid Englishman might not have been so very far wrong after all, who, on Canova's death, inquired of his brother whether it was "his intention to carry on the business!" Locke, Helvetius, and Diderot believed that all men have an equal aptitude for genius; and that what some are able to effect under the influence of the fundamental laws which regulate the march of intellect, must also be within the reach of others who, in the same circumstances, apply themselves to like pursuits. But while admitting to the fullest extent the wonderful achievements of labour, and also recognising the fact that men of the most distinguished genius have invariably been found the most indefatigable workers, it must nevertheless be sufficiently obvious that, without the original endowment of heart and brain, no amount of labour, however well applied, would have produced a Shakespeare, a Newton, a Beethoven, or a Michael Angelo.

We have, however, a recent reassertor of the power of perseverance in a distinguished living engineer, Mr. G. P. Bidder, so well known in his youth as the wonderful Calculating Boy. In a charmingly modest account which he lately gave of himself before the Institute of Civil Engineers, Mr. Bidder insisted that his remarkable power of mental calculation, a power exhibited by so few that we must account it as abnormal, can be acquired by any one who will devote time, attention, and perseverance to the subject. "I have endeavoured," he said, "to examine my own mind, to compare it with that of others, and to discover if such be the case; but I can detect no particular turn of mind, beyond a predilection for figures, which many possess almost in an equal degree with myself. I do not mean to assert that all minds are alike constituted to succeed in mental computations; but I do say that, so far as I can judge, there may be as large a number of successful mental calculators as there are who attain eminence in any other branch of learning." Mr. Bidder urged that the proficiency at which he eventually arrived was mainly the result

of assiduous application. His father was a working mason, and his elder brother, who pursued the same calling, first taught the little boy to count 100. He counted the numbers over and over in tens. The numerals became as it were his friends, and he knew all their relations and acquaintances. He next set about learning the multiplication table in his own way, by means of peas or marbles; and a small bag of shot which he obtained, proved a great treasure to him. These he arranged into squares, each line consisting of an equal number of shot, and, counting their sides, he thus learned to multiply up to 10 times 10. Opposite his father's house lived a blacksmith, who, not having any children, had taken a nephew as his apprentice. With this old gentleman the boy Bidder struck up an acquaintance, and was allowed the privilege of running about his workshop. As his strength increased he was raised to the dignity of being permitted to blow the bellows for him, and on winter evenings he was allowed to perch himself on the forge-hearth, listening to his stories. On one of these occasions somebody by chance mentioned a sum—perhaps 9 times 9—which the boy at once answered correctly. This excited a little astonishment, and then other questions were put to “fickle” him, but which he answered with equal facility. The numbers multiplied were so high, that the old gentleman's nephew had to work up the sums with chalk upon a board, to see that they were right, and they were found so. The boy became talked of as a wonder, and halfpence began to flow into his pocket; so that, what with the gain and the *éclat*, he became still more attached to the science of arithmetic; and he got on by degrees until the multiple of figures which he could accomplish arrived at thousands, and he eventually became familiar with the multiplication table up to a million. The “Extraordinary Calculating Boy” was regarded as one of the prodigies of the day. The phrenologists had a cast taken of his “organs,” and he was cited in the ‘Phrenological Magazine’ as a remarkable

proof of the correctness of their "science." Some time after this he commenced the business of life as clerk in an assurance office, which he left to enter the service of a well-known engineer, the late Mr. H. R. Palmer. His advance was rapid, and his reputation soon became distinguished—a result due no less to his perseverance than to his eminent engineering ability. For he brought the same habit of study and application to the business of his profession, that he had already trained in mastering the science of numbers. Speaking to his friends of the Civil Engineers' Institute, he said: "I have sacrificed years of labour; I have striven with much perseverance to obtain, and to retain, a power or mastery over numbers, which will, probably, at all times be as rare as its utility in the ordinary affairs of life. Far be it from me to say, however, that it has been of little use to me. Undoubtedly the acquirement has attracted towards me a degree of notice which has ended in raising me from the position of a common labourer in which I was born, to that of being able to address you as one of the Vice-Presidents of this distinguished Society."

Dalton, the chemist, always repudiated the notion of his being "a genius," attributing everything which he had accomplished to simple industry and accumulation. John Hunter said of himself, "My mind is like a bee-hive; but full as it is of buzz and apparent confusion, it is yet full of order and regularity, and food collected with incessant industry from the choicest stores of nature." We have, indeed, but to glance at the biographies of great men to find that the most distinguished inventors, artists, thinkers, and workers of all sorts, owe their success, in a great measure, to their indefatigable industry and application. They were men who turned all things to gold—even time itself. Disraeli the elder held that the secret of all success consisted in being master of your subject, such mastery being attainable only through continuous application and study. Hence it happens that the men who have most moved the world, have not been so much men of genius, strictly so

called, as men of intense mediocre abilities, untiring workers, persevering, self-reliant, and indefatigable; not so often the gifted, of naturally bright and shining qualities, as those who have applied themselves diligently to their work, in whatever line that might lie. "Alas!" said a widow, speaking of her brilliant but careless son, "he has not the gift of continuance." Wanting in perseverance, such volatile natures are outstripped in the race of life by the diligent and even the dull. "Che va piano, va longano, e va lontano," says the Italian proverb: who goes slowly, goes long, and goes far.

*Che va piano
va sano e va
lontano*

Hence, a great point to be arrived at is to get the working quality well trained. When that is done, the race will be found comparatively easy. We must repeat and again repeat; facility will come with labour. Not even the simplest art can be accomplished without it; and what difficulties it is found capable of achieving! It was by early discipline and repetition that the late Sir Robert Peel cultivated those remarkable, though still mediocre powers, which rendered him so illustrious an ornament of the British Senate. When a boy at Drayton Manor, his father was accustomed to set him up at table to practise extemporaneous speaking; and he early accustomed him to repeat as much of the Sunday's sermon as he could carry away in his memory. Little progress was made at first, but by steady perseverance the habit of attention soon became powerful, and the sermon was at length repeated almost verbatim. When afterwards replying in succession to the arguments of his parliamentary opponents—an art in which he was perhaps unrivalled—it was little surmised that the extraordinary power of accurate remembrance which he displayed on such occasions had been originally diligently trained under the discipline of his father in the parish church of Drayton.

It is indeed marvellous what continuous application will effect in the commonest of things. It may seem a simple affair to play upon a violin; yet what a long and

laborious practice it requires! Giardini said to a youth who asked him how long it would take to learn it, "Twelve hours a day for twenty years together." Industry, it is said, *fait l'ours danser*. The poor figurante must devote years of incessant toil to her profitless task before she can shine in it. When Taglioni was preparing herself for her evening exhibition, she would, after a severe two hours' lesson from her father, fall down exhausted, and had to be undressed, sponged, and resuscitated, totally unconscious. The agility and bounds of the evening were ensured only at a price like this. The enormous preparatory training and labour undergone by these "artistes" is enough to shame the indolent and the supine engaged in more worthy pursuits. Less than half of such application devoted to self-culture or to self-improvement of any kind, could scarcely fail in ensuring success and leading to distinction.

Progress, however, of the best kind, is comparatively slow. Great results cannot be achieved at once; and we must be satisfied to advance in life as we walk, step by step. De Maistre says that "to know *how to wait* is the great secret of success." We must sow before we can reap, and often have to wait long, content meanwhile to look patiently forward in hope; the fruit best worth waiting for often ripening the slowest. But "time and patience," says the Eastern proverb, "change the mulberry leaf to satin."

To wait patiently, however, men must work cheerfully. Cheerfulness is an excellent working quality, imparting great elasticity to the character. As a bishop has said, "Temper is nine-tenths of Christianity;" so are cheerfulness and diligence nine-tenths of practical wisdom. They are the life and soul of success, as well as of happiness; perhaps the very highest pleasure in life consisting in clear, brisk, conscious working; energy, confidence, and every other good quality mainly depending upon it. Sydney Smith, when labouring as a parish priest at Foston-le-Clay, in Yorkshire,—though he did not feel himself to be in his proper element,—went cheerfully to work in the firm de-

termination to do his best. "I am resolved," he said, "to like it, and reconcile myself to it, which is more manly than to feign myself above it, and to send up complaints by the post of being thrown away, and being desolate, and such like trash." So Dr. Hook, when leaving Leeds for a new sphere of labour said, "Wherever I may be, I shall, by God's blessing, do with my might what my hand findeth to do; and if I do not find work, I shall make it."

Labourers for the public good especially, have to work long and patiently, often uncheered by the prospect of immediate recompense or result. The seeds they sow sometimes lie hidden under the winter's snow, and before the spring comes the husbandman may have gone to his rest. It is not every public worker who, like Rowland Hill, sees his great idea bring forth fruit in his lifetime. Adam Smith sowed the seeds of a great social amelioration in that dingy old University of Glasgow where he so long laboured, there laying the foundations of his 'Wealth of Nations;' and seventy years passed before his work bore substantial fruits, nor indeed are they all gathered in yet.

Nothing can compensate for the loss of hope in a man,—it entirely changes the character. "How can I work—how can I be happy," said a great but miserable thinker, "when I have lost all hope?" Hope is like the sun, which, as we journey towards it, casts the shadow of our burden behind us. One of the most cheerful and courageous, because one of the most hopeful of workers, was Carey, the missionary. When in India, it was no uncommon thing for him to weary out three pundits, who officiated as his clerks, in one day, he himself taking rest only in change of employment. Carey, himself the son of a shoemaker, was supported in his labours by Ward, the son of a carpenter, and Marshman, the son of a weaver. By their labours, a magnificent college was erected at Serampore; sixteen flourishing stations were established; the Bible was translated into sixteen languages, and the seeds were sown of a beneficent moral revolution in British India. Carey was

never ashamed of the humbleness of his origin. On one occasion, when at the Governor-General's table, he overheard an officer opposite him asking another, loud enough to be heard, whether Carey had not once been a shoemaker: "No, sir," exclaimed Carey immediately, "only a cobbler." An eminently characteristic anecdote has been told of his perseverance as a boy. When climbing a tree one day, his foot slipped, and he fell to the ground, breaking his leg by the fall. He was confined to his bed for weeks, but when his strength had grown again and he was able to walk without support, the very first thing he did was to go and climb that tree. Carey had need of this sort of dauntless courage for the great missionary work of his life, and nobly and resolutely did he do it.

It was a maxim of Dr. Young, the philosopher, that "Any man can do what any other man has done;" and it is unquestionable that he himself never recoiled from any trials to which he determined to subject himself. It is related of him, that the first time he mounted a horse, he was in company with the grandson of Mr. Barclay, of Ury, the well-known sportsman, when the horseman who preceded them leapt a high fence. Young wished to imitate him, but fell off his horse in the attempt. Without saying a word, he remounted, made a second effort, and was again unsuccessful, but this time he was not thrown further than on to the horse's neck, to which he clung. At the third trial, he succeeded, and cleared the fence.

The story of Timour the Tartar learning a lesson of perseverance under adversity from the spider is well known, and need not be repeated; but not less interesting is the following anecdote of Audubon, the American ornithologist, related by himself: "An accident," he says, "which happened to two hundred of my original drawings, nearly put a stop to my researches in ornithology. I shall relate it, merely to show how far enthusiasm—for by no other name can I call my perseverance—may enable the preserver of nature to surmount the most disheartening difficulties. I

left the village of Henderson, in Kentucky, situated on the banks of the Ohio, where I resided for several years, to proceed to Philadelphia on business. I looked to my drawings before my departure, placed them carefully in a wooden box, and gave them in charge of a relative, with injunctions to see that no injury should happen to them. My absence was of several months; and when I returned, after having enjoyed the pleasures of home for a few days, I inquired after my box, and what I was pleased to call my treasure. The box was produced and opened; but, reader, feel for me—a pair of Norway rats had taken possession of the whole, and reared a young family among the gnawed bits of paper, which, but a month previous, represented nearly a thousand inhabitants of air! The burning heat which instantly rushed through my brain was too great to be endured without affecting my whole nervous system. I slept for several nights, and the days passed like days of oblivion—until the animal powers being recalled into action, through the strength of my constitution, I took up my gun, my notebook, and my pencils, and went forth to the woods as gaily as if nothing had happened. I felt pleased that I might now make better drawings than before; and, ere a period not exceeding three years had elapsed, my portfolio was again filled.”

The accidental destruction of Sir Isaac Newton’s papers, by his little dog ‘Diamond’ upsetting a lighted taper upon his desk, by which the elaborate calculations of many years were in a moment destroyed, is a well-known anecdote, and need not here be repeated: it is said that the loss caused the philosopher such profound grief that it seriously injured his health, and impaired his understanding. An accident of a somewhat similar kind happened to the MS. of Mr. Carlyle’s first volume of his ‘French Revolution.’ He had lent the MS. to a literary neighbour to peruse. By some mischance or other, it had been left lying on the parlour floor, and become forgotten. Weeks ran on, and the historian sent for his MS., the printers being loud for

“copy.” Inquiries were made, and then it was found that the maid-of-all-work, finding what she conceived to be a bundle of waste paper on the floor, had used it to light the kitchen and parlour fires with! Such was the answer returned to Mr. Carlyle; and his consternation and despair may be imagined. There was, however, no help for him but to set himself resolutely to work to re-write his book; and he turned to and did it. He had no draft, and was compelled to rake up from his memory facts, ideas, and expressions, which had long since been dismissed. The composition of the book in the first instance had been a work of real pleasure; the re-writing of it a second time was one of pain and anguish almost beyond belief. That he persevered and finished the volume under such circumstances, affords an instance of determination of purpose which has seldom been exceeded.

The lives of all eminent inventors are eminently illustrative of the same quality of perseverance. George Stephenson, when addressing young men, was accustomed to sum up his best advice to them in the words, “Do as I have done—persevere.” He had worked at the improvement of his locomotive for some fifteen years before achieving his decisive victory at Rainhill; and Watt was engaged for some thirty years upon the condensing-engine before he brought it to perfection. But there are equally striking illustrations of perseverance to be found in every other branch of science, art, and industry. Perhaps one of the most interesting is that connected with the disentanglement of the Nineveh marbles, and the discovery of the long-lost cuneiform or arrow-headed character in which the inscriptions on them are written—a kind of writing which had been lost to the world since the period of the Macedonian conquest of Persia.

An intelligent cadet of the East India Company, stationed at Kermanshah, in Persia, had observed the curious cuneiform inscriptions on the old monuments in the neighbourhood—so old that all historical traces of them had been lost,

—and amongst the inscriptions which he copied was that upon the celebrated rock of Behistun—a perpendicular rock rising abruptly some 1700 feet from the plain, the lower part bearing inscriptions for the space of about 300 feet, in three languages—the Persian, Scythian, and Assyrian. Comparison of the known with the unknown, of the language which survived with the language that had been lost, enabled this cadet to acquire some knowledge of the cuneiform character, and even to form an alphabet. Mr. (afterwards Sir Henry) Rawlinson sent his tracings home for examination. No professors in colleges knew anything about the cuneiform character; but there was a *ci-devant* clerk of the East India House—a modest unknown man of the name of Norris—who had made this little-understood subject his study, to whom the tracings were submitted; and so accurate was his knowledge, that, though he had never seen the Behistun rock, he pronounced that Rawlinson had not copied the puzzling inscription with proper exactness. Rawlinson, who was still in the neighbourhood of the rock, compared his copy with the original, and found that Norris was right; and by further comparison and careful study the knowledge of the cuneiform writing was thus greatly advanced.

But to make the learning of these two self-taught men of avail, a third labourer was necessary in order to supply them with material for the exercise of their skill. Such a labourer presented himself in the person of Austen Layard, originally an articled clerk in the office of a London solicitor. One would scarcely have expected to find in these three men, a cadet, an India House clerk, and a lawyer's clerk, the discoverers of a forgotten language, and of the buried history of Babylon; and yet it was so. Layard was a youth of only twenty-two, travelling in the East, when he was possessed with a desire to penetrate the regions beyond the Euphrates. Accompanied by a single companion, trusting to his arms for protection, and, what was better, to his cheerfulness, politeness, and chi-

valrous bearing, he passed safely amidst tribes at deadly war with each other; and, after the lapse of many years, with comparatively slender means at his command, but aided by intense labour and perseverance, resolute will and purpose, and almost sublime patience, borne up throughout by his passionate enthusiasm for discovery and research, he succeeded in laying bare and digging up an amount of historical treasures, the like of which has probably never before been collected by the industry of any one man. Not less than two miles of bas-reliefs were thus brought to light by Mr. Layard. The selection of these valuable antiquities now placed in the British Museum were found so curiously corroborative of the scriptural records of events which occurred some three thousand years ago, that they burst upon the world almost like a new revelation. And the story of the disentanglement of these remarkable works, as told by Mr. Layard himself in his 'Monuments of Nineveh,' will always be regarded as one of the most charming and unaffected records which we possess of individual enterprise, industry, and energy.

Literary life affords abundant illustrations of the same power of perseverance; and perhaps no career is more instructive, viewed in this light, than that of Sir Walter Scott. His admirable working qualities were trained in a lawyer's office, where he pursued for many years a routine of drudgery scarcely above that of a mere copying clerk. His daily dry routine made his evenings, which were his own, all the more sweet; and he generally devoted them to reading and study. He himself attributed to his prosaic office discipline that habit of steady, sober diligence, in which mere literary men are so often found wanting. As a copying clerk he was allowed 3*d.* for every page containing a certain number of words; and he sometimes, by extra work, was able to copy as many as 120 pages in twenty-four hours, thus earning some 30*s.*; out of which he would sometimes purchase an odd volume otherwise beyond his means. During his after-life Scott was

wont to pride himself upon being a man of business, and he averred, in contradiction to what he called the cant of sonnetteers, that there was no necessary connexion between genius and an aversion or contempt for the common duties of life. On the contrary, he was of opinion that to spend some fair portion of every day in any matter-of-fact occupation was good for the higher faculties themselves in the upshot. While afterwards acting as clerk to the Court of Session in Edinburgh, he performed his literary work chiefly before breakfast, attending the court during the day, where he was occupied in ordinary drudgery, such as authenticating registered deeds and writings of various kinds; on the whole, says Lockhart, "it forms one of the most remarkable features in his history, that throughout the most active period of his literary career, he must have devoted a large proportion of his hours, during half at least of every year, to the conscientious discharge of professional duties." It was a principle of action which he laid down for himself, that he must earn his living by business, and not by literature: he said, "I determined that literature should be my staff, not my crutch, and that the profits of my literary labour, however convenient otherwise, should not, if I could help it, become necessary to my ordinary expenses."

His punctuality was one of the most carefully cultivated of his habits, otherwise it had not been possible for him to get through so enormous an amount of literary labour. He made it a rule to answer every letter received by him, on the same day, except where inquiry and deliberation were requisite. Nothing else could have enabled him to keep abreast with the flood of communications that poured in upon him and put his good nature to the severest test. It was his practice to rise by five o'clock, and light his own fire. He shaved and dressed with deliberation, and was seated at his desk by six o'clock, all his papers arranged before him in the most accurate order, with his books of reference marshalled round him on the floor, while at least one favourite dog lay watching his eye, outside the line of books. Thus

by the time the family assembled for breakfast, between nine and ten, he had done enough—to use his own words—to break the neck of the day's work. But with all his diligent and indefatigable industry, and his immense knowledge, the result of many years' patient labour, Scott always spoke with the greatest modesty of his own powers. On one occasion he said, "Throughout every part of my career I have felt pinched and hampered by my own ignorance."

Such is true wisdom and humility; for the more a man really knows, the less conceited will he be. The student at Trinity College who went up to his professor to take leave of him because he had "finished his education," was wisely rebuked by the professor's reply, "Indeed! I am only beginning mine." The superficial person who has obtained a smattering of many things, but knows nothing well, may pride himself upon his gifts; but the sage humbly confesses that "all he knows is, that he knows nothing," or like Newton, that he has been only engaged in picking shells by the sea shore, while the great ocean of truth extends itself all unexplored before him.

The lives of second-rate literary men furnish equally remarkable illustrations of the power of perseverance. The late John Britton, author of 'The Beauties of England and Wales,' and of many valuable architectural works, furnished a striking instance of well-directed application. He was born in a miserable cot in Kingston, Wiltshire. His father had been a baker and maltster, but was ruined in trade, and became insane, while Britton was yet a child. The boy received very little schooling, but a great deal of bad example, which happily did not destroy him. He was early in life set to labour with an uncle, a tavern-keeper in Clerkenwell, under whom he bottled, corked, and binned wine, for more than five years. His health failing him, his uncle turned him adrift in the world, with only two guineas, the fruits of his five years' service, in his pocket. During the next seven years of his life he endured many vicissitudes and hardships. Yet he

says, in his autobiography, "in my poor and obscure lodgings, at eighteen pence a week, I indulged in study, and often read in bed during the winter evenings, because I could not afford a fire." Travelling on foot to Bath, he there obtained an engagement as a cellarman, but shortly after we find him back in the metropolis again, almost penniless, shoeless, and shirtless. He succeeded, however, in obtaining employment as a cellarman at the London Tavern, and it was his duty to be in the cellar from seven in the morning until eleven at night. His health broke down under this confinement in the dark, added to the heavy work; and he then engaged himself, at fifteen shillings a week, to an attorney—for he had been diligently cultivating the art of writing during the few spare minutes that he could call his own. While in this employment, he devoted his leisure principally to perambulating the bookstalls, where he read books by snatches which he could not buy, and thus picked up a good deal of odd knowledge. Then he shifted to another office, at the advanced wages of twenty shillings a week, still reading and studying. At twenty-eight he was able to write a book, which he published under the title of 'The Enterprising Adventures of Pizarro;' and from that time until quite recently, during a period of about fifty-five years, Britton was occupied in laborious literary occupation, chiefly connected with English antiquities. The number of his published works is not fewer than eighty-seven; the most important being 'The Cathedral Antiquities of England,' in fourteen volumes, a truly magnificent work; itself the best monument of John Britton's indefatigable industry.

Loudon, the landscape gardener, was a man of somewhat similar character, possessed of an extraordinary working power. The son of a farmer near Edinburgh, he was early inured to work. His skill in drawing plans and making sketches of scenery induced his father to train him for a landscape gardener. During his apprenticeship he sat up two whole nights every week to study; yet he worked harder during the day than any labourer. During his stu-

dious hours he learnt French, and before he was eighteen translated a life of Abelard for an Encyclopædia. He was so eager to make progress in life, that when only twenty, while working as a gardener in England, he wrote down in his note-book, "I am now twenty years of age, and perhaps a third part of my life has passed away, and yet what have I done to benefit my fellow men?" an unusual reflection for a youth of only twenty. From French he proceeded to learn German, and rapidly mastered that language. He now took a large farm, for the purpose of introducing Scotch improvements in the art of agriculture, and soon succeeded in realising a considerable income. The continent being thrown open on the cessation of the war, he proceeded to travel for the purpose of observation, making sketches of the system of gardening in all countries, which he afterwards introduced in the historical part of his laborious Encyclopædia of Gardening. He twice repeated his journeys abroad for a similar purpose, the result of which appeared in his Encyclopædias; perhaps amongst the most remarkable works of their kind, distinguished for the immense mass of useful matter which they contain, all collected by dint of persevering industry and labour, such as has rarely been equalled.

The career of Samuel Drew is perhaps less known, but is no less remarkable than any of those which we have cited. His father was a hard-working labourer of the parish of St. Austell, in Cornwall. Though poor, he contrived to send his two sons to a penny-a-week school in the neighbourhood. Jabez, the elder, took delight in learning, and made great progress in his lessons; but Samuel, the younger, was a dunce, notoriously given to mischief and playing truant. Hence it was principally to his mother that he was indebted for nearly all the reading and writing that he learned in youth. When about eight years old he was put to manual labour, earning three-halfpence a day as a buddle-boy at a tin mine.

His mother having died, the boy was allowed to grow

up altogether neglected by his father, who, being a Wesleyan local preacher, was so much occupied by his class engagements that he had no time to devote to the training of his own children. When about ten years old, the boy was apprenticed to a shoemaker, and while in this employment he endured many hardships, living, as he used to say, "like a toad under a harrow." He often thought of running away and becoming a pirate, or something of that sort, and he seems to have grown in recklessness as he grew in years. In robbing orchards he was always a leader; and, as he grew older, his greatest delight was in taking part in a poaching or smuggling exploit. When about seventeen, before his apprenticeship was out, he ran away from his home, with sixteenpence halfpenny in his pocket. His intention was to enter on board a man-of-war; but, sleeping in a hay-field for the night cooled him a little, and, in passing through Liskeard, he applied to a master shoemaker for employment, and obtained it. While there, his brother, who was in search of him, hearing of the lad's whereabouts, found him out, and took him home again; then he was employed for a time in the ordinary labours of a small farm, and in running the post between St. Austell and Bodmin.

Drew next removed to the neighbourhood of Plymouth to work at his shoemaking business, and while at Cawsand he won a prize for cudgel-playing, in which he seems to have been an adept. While living in this neighbourhood he had nearly lost his life in one of the smuggling exploits in which he still continued eager to join, partly induced by the love of adventure, and partly by the love of gain, for his regular wages were not more than eight shillings a-week. One night notice was given throughout Crafthole, that a smuggler was off the coast, and ready to land her cargo; on which the male population of the place—nearly all smugglers—made for the shore. One party remained on the rocks to make signals, and dispose of the goods as they were landed; and another manned the boats, Samuel Drew

being of the latter party. The night was intensely dark, and but little progress had been made in landing the vessel's cargo, when the wind rose, with a heavy sea. The men in the boats, however, determined to persevere, and several trips were made between the smuggler, now standing farther out to sea, and the shore. One of the men in the boat in which Drew was, had his hat blown off by the wind, and in attempting to recover it, the boat was upset. Three of the men were immediately drowned, and Samuel and two or three others clung to the boat for a time, but finding it drifting fast out to sea, they took to swimming. They were about two miles from shore, in an intensely dark night. After being about three hours in the water Drew reached some rocks near the shore, with one or two others, where he remained benumbed with cold till morning, when he and his companions were discovered and taken off, more dead than alive. A keg of brandy from the cargo just landed was brought, the head knocked in with a hatchet, and a bowlfull of the liquid presented to the survivors; and, shortly after, Drew was able to walk two miles through the deep snow, to his lodgings.

This was a very unpromising beginning of a life, and yet this same Drew, scapegrace, orchard-robber, shoemaker, cudgel-player, and smuggler, outlived the recklessness of his youth, and became distinguished as a minister of the Gospel and a writer of good books. Happily, before it was too late, the energy which characterised him was turned into wholesome directions, and rendered him as eminent in usefulness as he had before been in wickedness. His father again took him back to St. Austell, and found employment for him as a journeyman shoemaker. Perhaps his recent escape from death had tended to make the young man serious, and we shortly find him, attracted by the forcible preaching of Dr. Adam Clarke, become a member of the Wesleyan Methodists. His brother having died about the same time, the impression of seriousness was deepened; and thenceforward he was an altered man. He recommenced

the work of education, for he had almost forgotten how to read and write; and even after several years' practice, a friend compared his writing to the traces of a spider dipped in ink, and set to crawl upon paper. Speaking of himself, about the same time, Drew afterwards said, "The more I read, the more I felt my own ignorance; and the more I felt my ignorance, the more invincible became my energy to surmount it. Every leisure moment was now employed in reading one thing or another. Having to support myself by manual labour, my time for reading was but little, and to overcome this disadvantage, my usual method was to place a book before me while at meat, and at every repast I read five or six pages." The perusal of Locke's 'Essay on the Understanding' gave the first metaphysical turn to his mind. "It awakened me from my stupor," said he, "and induced me to form a resolution to abandon the grovelling views which I had been accustomed to entertain."

Drew now began business on his own account, though his whole capital was only fourteen shillings; but his steady good character being now proved, a neighbouring miller volunteered a loan, which was accepted, and, success attending his industry, the debt was repaid at the end of a year. He started in life with a determined resolution to "owe no man anything," and he held to it in the midst of many privations. Often he went to bed supperless, to avoid rising in debt. His ambition was to achieve independence by industry and rigid economy, and in this he gradually succeeded. In the midst of incessant toil, he laboured to carry forward the cultivation of his mind, studying even astronomy, history, and metaphysics. He was induced to pursue the latter study chiefly because it required fewer books to consult than either of the others. "It appeared to be a thorny path," he said, "but I determined, nevertheless, to enter, and accordingly began to tread it."

Added to his labours in shoemaking and metaphysics, Drew became a local preacher and a class leader: overflowing with activity, he also entered eagerly into the

discussion of politics, and he even ran some risk of becoming a gadabout and busybody. Politicians resorted to his shoemaking shop to talk politics, and he went to theirs for a similar purpose. This so encroached upon his time that he found it necessary sometimes to work until midnight to make up for the hours lost during the day. Shoemakers are proverbially political characters, and Drew's fervour soon became the talk of the village. While busy one night hammering away at a shoe-sole, a little boy, seeing a light in the shop, put his mouth to the keyhole of the door, and called out in a shrill pipe, "Shoemaker! shoemaker! work by night and run about by day!" A friend, to whom Drew afterwards told the story, asked, "And did you not run after the boy, and strap him?" "No, no," was the reply; "had a pistol been fired off at my ear, I could not have been more dismayed or confounded. I dropped my work, and said to myself, 'True, true! but you shall never have that to say of me again.' To me that cry was as the voice of God, and it has been a word in season throughout my life. I learnt from it not to leave till to-morrow the work of to-day, or to idle when I ought to be working."

From that moment Drew dropped politics, and stuck to his daily work, and to self-improvement in his spare hours: but he never allowed the latter to interfere with his business, though it frequently broke in upon his rest. He married, and thought of emigrating to America; but he remained working on. His literary taste first took the direction of poetical composition; and from some of the fragments which have been preserved, it appears that his speculations as to the immateriality and immortality of the soul had their origin in these poetical musings. His study was the kitchen, where his wife's bellows served him for a desk; and he wrote amidst the cries and cradlings of his children. Paine's 'Age of Reason' having come out about this time, and excited great interest amongst young readers, he composed a pamphlet in refutation of its arguments, which was published. He used afterwards to say that it was the 'Age

of Reason' that made him an author. Various pamphlets from his pen now appeared in rapid succession, and a few years later, whilst still working on at shoemaking, he wrote and published his admirable 'Essay on the Immateriality and Immortality of the Human Soul,' which he sold for twenty pounds, a great sum in his estimation at the time. The book went through many editions, and is still prized.

He was in no wise puffed up by his success, as many young authors are, but, long after he had become celebrated as a writer, used to be seen sweeping the street before his door, or helping his apprentices to carry in the winter's coals. Some one telling him that he compromised his dignity by so doing, he replied, "The man who is ashamed to carry in his own coals deserves to sit all the winter by an empty grate." Nor could he, for some time, bring himself to regard literature as a profession to live by. His first care was to secure an honest livelihood by his business, and to put into the "lottery of literary success," as he termed it, only the surplus of his time. But a new and honourable sphere of life now opened before him; and, at the invitation of Dr. Coke, he entered into an engagement with that gentleman to assist him in the arrangement and completion of certain works in which he was engaged. He continued an active literary career in connection with the Wesleyan body, editing one of their magazines, and superintending the publication of many of their denominational works, writing also in the 'Eclectic Review,' and compiling and publishing a valuable history of his native county, Cornwall, with numerous other works. Of himself he truly said, "Raised from one of the lowest stations in society, I have endeavoured through life to bring my family into a state of respectability, by honest industry, frugality, and a high regard for my moral character. Divine providence smiled on my exertions, and crowned my wishes with success."

The late Joseph Hume pursued a different career in life,

but worked in an equally conscientious spirit. He was a man of moderate parts, but of great industry, and unimpeachable honesty of purpose. The motto of his life was "Perseverance," and well he acted up to it. His father dying while he was a mere child, his mother opened a small shop in Montrose, and toiled hard to maintain her family and bring them up respectably. Joseph she put apprentice to a surgeon, and educated for the medical profession. Having got his diploma, he made several voyages to India as ship's surgeon,* and afterwards obtained a cadetship in the Company's service. None worked harder, or lived more temperately, than he did; and, securing the confidence of his superiors, who found him a capable man in the performance of his duty, they gradually promoted him to higher rank. In 1803 he was with the division of the army under General Powell, in the Mahratta war; and the interpreter having died, Hume, who had meanwhile studied and mastered the native languages, was appointed to the office. He was also made chief of the medical staff. But as if this were not enough to occupy his full working power, he undertook in addition the offices of paymaster and postmaster, and satisfactorily performed their duties. He also undertook large contracts for supplying the commissariat, which he conducted with advantage to the army and profit to himself. After about ten years' unremitting labour, he returned to

* It was characteristic of Mr. Hume, that, during these professional voyages between England and India, he should diligently apply his spare time to the study of navigation and seamanship; and many years after, it proved of use to him in a remarkable manner. In 1825, when on his passage from London to Leith by a sailing smack, the vessel had scarcely cleared the mouth of the Thames when a sudden storm came on, she was driven out of her course, and, in the darkness of the night, she struck on the Goodwin Sands. The captain, losing his presence of mind, seemed incapable of giving coherent orders, and it is probable that the vessel would shortly have become a total wreck, had not one of the passengers suddenly taken the command and directed the working of the ship, himself taking the helm while the danger lasted. The vessel was thus saved, and the stranger was Mr. Hume. Mr. Reid, of Banchory, was one of the numerous passengers on board, and but for him we should never have heard of the story, for Joseph Hume was one of the last men to boast of his own prowess.

England with a competency; and one of his first acts was to make provision for the poorer members of his family.

But Joseph Hume was not a man idly to enjoy the fruits of his industry; indeed work and occupation were necessary for his comfort and happiness. To make himself fully acquainted with the actual state of his own country, and the condition of the people, he visited every town in the United Kingdom which enjoyed any degree of manufacturing celebrity. Afterwards he travelled abroad, gathering a store of experience of men and states. Returned to England, he entered Parliament in 1812, and continued a member of that assembly, with a short interruption, for a period of about thirty-four years. His first recorded speech was on the subject of public education, and throughout his long and honourable career he took an active and earnest interest in that and all other questions calculated to elevate and improve the condition of the people—criminal reform, savings-banks, free trade, economy and retrenchment, extended representation, and such like measures, all of which he indefatigably promoted. Whatever subject he undertook, he worked at with all his might. He was not a good speaker, but what he said was believed to proceed from the lips of an honest, single-minded, accurate man. If ridicule, as Shaftesbury says, be the test of truth, Joseph Hume stood the test well. No man was more laughed at, but there he stood perpetually, and literally, “at his post.” He was usually beaten on a division, but the influence which he exercised was nevertheless deeply felt, and many important financial improvements were effected by him even with the vote directly against him. The amount of hard work which he contrived to get through was something extraordinary. He rose at six, wrote letters and arranged his papers for the House; then, after breakfast, he received persons on business, sometimes as many as twenty in a morning. The House rarely assembled without him, and though the debate were prolonged to two or three o’clock in the following morning, be sure you would find Mr. Hume’s name in any division

that took place. In short, to perform the work which Mr Hume did, extending over so long a period, in the face of so many Administrations, week after week, year after year, —to be out-voted, beaten, laughed at, standing on many occasions almost alone,—to persevere in the face of every discouragement, preserving his temper unruffled, never relaxing in his energy or his hope, and living to see the greater number of his measures adopted with acclamation, must be regarded as one of the most marvellous things of its kind in the history of human character.

CHAPTER IV.

HELPS AND OPPORTUNITIES—SCIENTIFIC PURSUITS.

“Neither the naked hand, nor the understanding, left to itself, can do much; the work is accomplished by instruments and helps, of which the need is not less for the understanding than the hand.”—*Bacon*.

“Opportunity has hair in front, behind she is bald; if you seize her by the forelock you may hold her, but, if suffered to escape, not Jupiter himself can catch her again.”—*From the Latin*.

ACCIDENT does very little towards the production of any great result in life. Though sometimes what is called “a happy hit” may be made by a bold venture, the old and common highway of steady industry and application is the only safe road to travel. It is said of the landscape painter Wilson, that when he had finished a picture in a tame, correct manner, he would step back to some distance, with his pencil fixed at the end of a long stick, and after gazing earnestly on his work, he would suddenly dash up and by a few bold touches give a brilliant finish to his painting. But it will not do for every one who would produce an effect, to throw his brush at the canvass in the hope of producing a picture. The capability of putting in these last vital touches is acquired only by the labour of a life; and the probability is, that the artist who has not carefully trained himself beforehand, in attempting to produce a brilliant effect at a dash, will only produce a blotch.

26 Sedulous attention and pains-taking industry always mark the true worker. The greatest men are not those who “despise the day of small things,” but those who improve them the most carefully. Michael Angelo was one

day explaining to a visitor at his studio, what he had been doing at a statue since his previous visit. "I have re-touched this part—polished that—softened this feature—brought out that muscle—given some expression to this lip, and more energy to that limb." "But these are trifles," remarked the visitor. "It may be so," replied the sculptor, "but recollect that trifles make perfection, and perfection is no trifle." So it was said of Nicholas Poussin, the painter, that the rule of his conduct was, that "whatever was worth doing at all was worth doing well;" and when asked, late in life, by his friend Vigneul de Marville, by what means he had gained so high a reputation among the painters of Italy, Poussin emphatically answered, "Because I have neglected nothing."

Although there are discoveries which are said to have been made by accident, if carefully inquired into, it will be found that there has really been very little that was accidental about them. For the most part, these so-called accidents have only been opportunities, carefully improved by Genius. The fall of the apple at Newton's feet has often been quoted in proof of the accidental character of some discoveries. But Newton's whole mind had already been devoted for years to the laborious and patient investigation of the subject of gravitation; and the circumstance of the apple falling before his eyes was suddenly apprehended only as genius could apprehend it, and served to flash upon him the brilliant discovery then bursting on his sight. In like manner, the brilliantly-coloured soap-bubbles blown from a common tobacco-pipe—though "trifles light as air" in most eyes—suggested to Dr. Young his beautiful theory of "interferences," and led to his discovery relating to the diffraction of light. Although great men are popularly supposed only to deal with great things, men such as Newton and Young were ready to detect the significance of the most familiar and simple facts; their greatness consisting mainly in their wise interpretation of them.

The difference between men consists, in a great measure,

in the intelligence of their observation. The Russian proverb says of the non-observant man, "He goes through the forest and sees no firewood." "The wise man's eyes are in his head," says Solomon, "but the fool walketh in darkness." "Sir," said Johnson, on one occasion, to a fine gentleman just returned from Italy, "some men will learn more in the Hampstead stage than others in the tour of Europe." It is the mind that sees as well as the eye. Where unthinking gazers observe nothing, men of intelligent vision penetrate into the very fibre of the phenomena presented to them, attentively noting differences, making comparisons, and detecting their underlying idea. Many, before Galileo, had seen a suspended weight swing before their eyes with a measured beat; but he was the first to detect the value of the fact. One of the vergers in the cathedral at Pisa, after replenishing with oil a lamp which hung from the roof, left it swinging to and fro; and Galileo, then a youth of only eighteen, noting it attentively, conceived the idea of applying it to the measurement of time. Fifty years of study and labour, however, elapsed, before he completed the invention of his Pendulum,—an invention the importance of which, in the measurement of time and in astronomical calculations, can scarcely be overvalued. In like manner, Galileo, having casually heard that one Lippershey, a Dutch spectacle-maker, had presented to Count Maurice of Nassau an instrument by means of which distant objects appeared proximate to the beholder, addressed himself to the cause of such a phenomenon, which led to the invention of the telescope, and thus proved the commencement of important astronomical discoveries. Discoveries such as these could never have been made by a negligent observer, or by a mere passive listener.

While Captain (afterwards Sir Samuel) Brown was occupied in studying the construction of bridges, with the view of contriving one of a cheap description to be thrown across the Tweed, near which he lived, he was walking in his garden one dewy autumn morning, when he saw a tiny

spider's net suspended across his path. The idea immediately occurred to him, that a bridge of iron ropes or chains might be constructed in like manner, and the result was the invention of his Suspension Bridge. So James Watt, when consulted about the mode of carrying water by pipes under the Clyde, along the unequal bed of the river, turned his attention one day to the shell of a lobster presented at table; and from that model he invented an iron tube, which, when laid down, was found effectually to answer the purpose. Sir Isambert Brunel took his first lessons in forming the Thames Tunnel from the tiny shipworm: he saw how the little creature perforated the wood with its well-armed head, first in one direction and then in another, till the archway was complete, and then daubed over the roof and sides with a kind of varnish; and by copying this work exactly on a large scale, Brunel was at length enabled to accomplish his great engineering work.

It is the intelligent eye of the careful observer which gives these apparently trivial phenomena their value. So trifling a matter as the sight of seaweed floating past his ship, enabled Columbus to quell the mutiny which arose amongst his sailors at not discovering land, and to assure them that the eagerly sought New World was not far off. There is nothing so small that it should remain forgotten; and no fact, however trivial, but may prove useful in some way or other if carefully interpreted. Who could have imagined that the famous "chalk cliffs of Albion" had been built up by tiny insects—detected only by the help of the microscope—of the same order of creatures that have gemmed the sea with islands of coral! And who that contemplates such extraordinary results, arising from infinitely minute operations, will venture to question the power of little things?

It is the close observation of little things which is the secret of success in business, in art, in science, and in every pursuit in life. Human knowledge is but an accumulation of small facts, made by successive generations of men,

the little bits of knowledge and experience carefully treasured up by them growing at length into a mighty pyramid. Though many of these facts and observations seemed in the first instance to have but slight significance, they are all found to have their eventual uses, and to fit into their proper places. Even many speculations seemingly remote, turn out to be the basis of results the most obviously practical. In the case of the conic sections discovered by Apollonius Pergæus, twenty centuries elapsed before they were made the basis of astronomy—a science which enables the modern navigator to steer his way through unknown seas, and traces for him in the heavens an unerring path to his appointed haven. And had not mathematicians toiled for so long, and, to uninstructed observers, apparently so fruitlessly, over the abstract relations of lines and surfaces, it is probable that but few of our mechanical inventions would have seen the light.

When Franklin made his discovery of the identity of lightning and electricity, it was sneered at, and people asked, "Of what use is it?" To which his apt reply was, "What is the use of a child? It may become a man!" When Galvani discovered that a frog's leg twitched when placed in contact with different metals, it could scarcely have been imagined that so apparently insignificant a fact could have led to important results. Yet therein lay the germ of the Electric Telegraph, which binds the intelligence of continents together, and probably before many years elapse will "put a girdle round the globe." So too, little bits of stone and fossil, dug out of the earth, intelligently interpreted, have issued in the science of geology and the practical operations of mining, in which large capitals are invested, and vast numbers of persons profitably employed.

The gigantic machinery employed in pumping our mines, working our mills and manufactories, and driving our steamships and locomotives, in like manner depends for its supply of power upon so slight an agency as little drops of water expanded by heat—that familiar agency called steam, which

1/2ce. we see issuing from the common tea-kettle spout, but when pent up within an ingeniously contrived mechanism, displays a force equal to that of millions of horses, and contains a power to rebuke the waves and to set even the hurricane at defiance. The same power at work within the bowels of the earth has been the cause of many of those semi-miraculous catastrophes — volcanoes and earthquakes — which have played so mighty a part in the history of the globe.

It is said that the Marquis of Worcester's attention was first accidentally directed to the subject of steam power, by the tight cover of a vessel containing hot water having been blown off before his eyes, when confined a prisoner in the Tower. He published the result of his observations in his 'Century of Inventions,' which formed a sort of text-book for inquirers into the powers of steam for several generations, until Savary, Newcomen, and others, applying it to practical purposes, brought it to the state in which Watt found it when called upon to repair a model of Newcomen's engine, which belonged to the University of Glasgow. This accidental circumstance was an opportunity for Watt, which he was not slow to improve; and it was the labour of his life to bring the steam-engine to perfection.

This art of seizing opportunities and turning even accidents to account, bending them to some purpose, is a great secret of success. Dr. Johnson has defined genius to be "a mind of large general powers accidentally determined in some particular direction." Men who are resolved to find a way for themselves, will always find opportunities enough; and if they do not lie ready to their hand, they will make them. It is not those who have enjoyed the advantages of colleges, museums, and public galleries, that have accomplished the most for science and art; nor have the greatest mechanics and inventors been trained in mechanics' institutes. Necessity, oftener than facility, has been the mother of invention; and the most prolific school of all has been the school of difficulty. Some of the very

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best workmen have had the most indifferent tools to work with. But it is not tools that make the workman, but the trained skill and perseverance of the man himself. Indeed it is proverbial that the bad workman never yet had a good tool. Some one asked Opie by what wonderful process he mixed his colours. "I mix them with my brains, sir," was his reply. It is the same with every workman who would excel. Ferguson made marvellous things—such as his wooden clock, that accurately measured the hours—by means of a common penknife, a tool in everybody's hand; but then everybody is not a Ferguson. A pan of water and two thermometers were the tools by which Dr. Black discovered latent heat; and a prism, a lens, and a sheet of pasteboard enabled Newton to unfold the composition of light and the origin of colours. An eminent foreign *savant* once called upon Dr. Wollaston, and requested to be shown over his laboratories in which science had been enriched by so many important discoveries, when the doctor took him into a little study, and, pointing to an old tea-tray on the table, containing a few watch-glasses, test papers, a small balance, and a blow-pipe, said, "There is all the laboratory that I have!"

Stothard learnt the art of combining colours by closely studying butterflies' wings: he would often say that no one knew what he owed to these tiny insects. A burnt stick and a barn door served Wilkie in lieu of pencil and canvass. Bewick first practised drawing on the cottage walls of his native village, which he covered with his sketches in chalk; and Benjamin West made his first brushes out of the cat's tail. Ferguson laid himself down in the fields at night in a blanket, and made a map of the heavenly bodies by means of a thread with small beads on it stretched between his eye and the stars. Franklin first robbed the thunder cloud of its lightning by means of a kite made with two cross sticks and a silk handkerchief. Watt made his first model of the condensing steam-engine out of an old anatomist's syringe, used to inject the arteries

previous to dissection. Gifford worked his first problem in mathematics, when a cobbler's apprentice, upon small scraps of leather, which he beat smooth for the purpose; whilst Rittenhouse, the astronomer, first calculated eclipses on his plough handle.

The most ordinary occasions will furnish a man with opportunities or suggestions for improvement, if he be but prompt to take advantage of them. Professor Lee was first attracted to the study of Hebrew by finding a Bible in this language in a synagogue, while working as a common carpenter at the repairs of the benches. He became possessed with a desire to read the book in the original, and, buying a cheap second-hand copy of a Hebrew grammar, he set to work and soon learnt the language for himself. As Edmund Stone said to the Duke of Argyle, in answer to his grace's inquiry, how he, a poor gardener's boy, had contrived to be able to read Newton's Principia in Latin, "One needs only to know the twenty-four letters of the alphabet in order to learn everything else that one wishes." Application and perseverance, and the diligent improvement of opportunities, will do the rest.

Sir Walter Scott found opportunities for self-improvement in every pursuit, and turned even accidents to account. Thus it was in the discharge of his functions as a writer's apprentice that he first penetrated into the Highlands, and formed those friendships among the surviving heroes of 1745 which served to lay the foundation of a large class of his works. Later in life, when employed as quartermaster of the Edinburgh Light Cavalry, he was accidentally disabled by the kick of a horse, and confined for some time to his house; but Scott was a sworn enemy to idleness, and he forthwith set his mind to work, and in three days composed the first canto of 'The Lay of the Last Minstrel,'—his first great original work.

The attention of Dr. Priestley, the founder of a new department of science, and the discoverer of many gases, was accidentally drawn to the subject by the circumstance

of his residing in the neighbourhood of a large brewery. Being an attentive observer, he noted, in visiting the brewery, the peculiar appearances attending the extinction of lighted chips in the gas floating over the fermented liquor. He was forty years old at the time, and knew nothing of chemistry; he obtained access, however, to books, which taught him little, for as yet nothing was known on the subject. Then he commenced experimenting, devising his own apparatus, which was of the rudest description. The curious results of his first experiments led to others, which in his hands shortly became the science of pneumatic chemistry. About the same time, Scheele was obscurely working in the same direction in a remote Swedish village; and he discovered several new gases, with no more effective apparatus at his command than a few apothecaries' phials and pigs' bladders.

Sir Humphry Davy, when an apothecary's apprentice, performed his first experiments with instruments of the rudest description. He extemporized the greater part of them himself, out of the motley materials which chance threw in his way. The pots and pans of the kitchen, and the phials and vessels of his master's surgery, were remorselessly put in requisition. It happened that a French vessel was wrecked off the Land's End, and the surgeon escaped, bearing with him his case of instruments, amongst which was an old-fashioned glyster apparatus; this article he presented to Davy, with whom he had become acquainted. The apothecary's apprentice received it with great exultation, and forthwith employed it as part of a pneumatic apparatus which he contrived, afterwards using it to perform the duties of an air-pump in one of his experiments on the nature and sources of heat.

In like manner Professor Faraday, Sir Humphry Davy's scientific successor, made his first experiments in electricity by means of an old bottle, while he was still a working bookbinder. And it is a curious fact that Faraday was first attracted to the study of chemistry by hearing one of Sir

Humphry Davy's lectures on the subject at the Royal Institution. A gentleman, who was a member, calling one day at the shop where Faraday was employed in binding books, found him poring over the article "Electricity" in an Encyclopædia placed in his hands to bind. The gentleman, having made inquiries, found he was curious about such subjects, and gave him an order of admission to the Royal Institution, where he attended a course of four lectures delivered by Sir Humphry. He took notes of the lectures, which he showed to the lecturer, who acknowledged their scientific accuracy, and was surprised when informed of the humble position of the reporter. Faraday then expressed his desire to devote himself to the prosecution of chemical studies, from which Sir Humphry at first endeavoured to dissuade him: but the young man persisting, he was at length taken into the Royal Institution as an assistant; and eventually the mantle of the brilliant apothecary's boy fell upon the worthy shoulders of the equally brilliant bookbinder's apprentice.

The words which Davy entered in his note-book, when about twenty years of age, working away in Dr. Beddoes' laboratory at Bristol, were eminently characteristic of him: "I have neither riches, nor power, nor birth, to recommend me; yet, if I live, I trust I shall not be of less service to mankind and my friends, than if I had been born with all these advantages." Davy possessed the capability, as Faraday does, of devoting all the powers of his mind to the practical and experimental investigation of a subject in all its bearings; and such a mind will rarely fail, by dint of mere industry and patient thinking, in producing results of the highest order. Coleridge said of Davy, "There is an energy and elasticity in his mind, which enables him to seize on and analyze all questions, pushing them to their legitimate consequences. Every subject in Davy's mind has the principle of vitality. Living thoughts spring up like turf under his feet." Davy, on his part, said of Coleridge, whose abilities he greatly admired, "With the most

exalted genius, enlarged views, sensitive heart, and enlightened mind, he will be the victim of a want of order, precision, and regularity."

Cuvier, when a youth, was one day strolling along the sands near Fiquainville, in Normandy, when he observed a cuttle fish lying stranded on the beach. He was attracted by the curious object, took it home to dissect, and began the study of the mollusca, which ended in his becoming one of the greatest among natural historians. In like manner, Hugh Miller's curiosity was excited by the remarkable traces of extinct sea-animals in the Old Red Sandstone, on which he worked as a quarryman. He inquired, observed, studied, and became a geologist. "It was the necessity," said he, "which made me a quarrier, that taught me to be a geologist."

Sir Joseph Paxton was acting as gardener to the Duke of Devonshire when the Committee of the Exhibition of 1851 advertised for plans of a building. The architects and engineers seem to have been very much at fault when Paxton submitted his design, and its novelty and remarkable suitability for the purposes intended at once secured its adoption. The first sketch was made upon a sheet of blotting-paper in the rooms of the Midland Railway Company at Derby; and this first rough sketch indicated the principal features of the building as accurately as the most finished drawings which were afterwards prepared. The great idea of the Crystal Palace was as palpable on the blotting paper as if it had been set forth in all the glory of water-colour and gold framing. Was it a sudden idea,—an inspiration of genius,—flashing upon the mind of one who, though no architect, must at least have been something of a poet? Not at all. The architect of the Crystal Palace was simply a man who cultivated opportunities—a laborious, pains-taking man, whose life had been a life of labour, of diligent self-improvement, of assiduous cultivation of knowledge. The idea, as Sir Joseph Paxton himself has shown, in a lecture before the Society of Arts, was slowly and

patiently elaborated by experiments extending over many years; and the Exhibition of 1851 merely afforded him the opportunity of putting forward his idea—the right thing at the right time—and the result was what we have seen.

It is not accident, then, that helps a man in the world, but purpose and persistent industry. These make a man sharp to discern opportunities, and turn them to account. To the feeble, the sluggish, and purposeless, the happiest opportunities avail nothing,—they pass them by, seeing no meaning in them. But if we are prompt to seize and improve even the shortest intervals of possible action and effort, it is astonishing how much can be accomplished. Watt taught himself chemistry and mechanics while working at his trade of a mathematical instrument-maker; and he availed himself of every opportunity to extend his knowledge of languages, literature, and the principles of science. Stephenson taught himself arithmetic and mensuration while working as an engineman during the night shifts, and he studied mechanics during his spare hours at home, thus preparing himself for his great work—the invention of the passenger locomotive. Dalton's industry was the habit of his life. He began from his boyhood, for he taught a little village-school when he was only about twelve years old; keeping the school in winter, and working upon his father's farm in summer. He would sometimes urge himself and companions to study by the stimulus of a bet, though bred a Quaker; and on one occasion, by his satisfactory solution of a problem, he in this way won as much as enabled him to buy a winter's store of candles. He went on indefatigably, making his meteorological observations until a day or two before he died,—having made and recorded upwards of 200,000 in the course of his life.

With perseverance, the very odds and ends of time may be worked up into results of the greatest value. An hour in every day withdrawn from frivolous pursuits, would, if profitably employed, enable a person of ordinary capacity to go far towards mastering a complete science. It would make

26 an ignorant man a well-informed man in ten years. We must not allow the time to pass without yielding fruits, in the form of something learnt worthy of being known, some good principle cultivated, or some good habit strengthened. Dr. Mason Good translated Lucretius while riding in his carriage in the streets of London, going his rounds among his patients. Dr. Darwin composed nearly all his works in the same way while driving about in his "sulky" from house to house in the country,—writing down his thoughts on little scraps of paper, which he carried about with him for the purpose. Hale wrote his 'Contemplations' while travelling on circuit. Dr. Burney learnt French and Italian while travelling on horseback from one musical pupil to another in the course of his profession. Kirke White learnt Greek while walking to and from a lawyer's office; and we personally know a man of eminent position in a northern manufacturing town, who learnt Latin and French while going messages as an errand boy in the streets of Manchester. (m)

Elihu Burritt attributed his first success in self-improvement, not to Genius, which he disclaimed, but simply to the careful employment of those invaluable fragments of time, called "odd moments." While working and earning his living as a blacksmith, he mastered some eighteen ancient and modern languages, and twenty-two European dialects. Withal, he was exceedingly modest, and thought his achievements nothing extraordinary. Like another learned and wise man, of whom it was said that he could be silent in ten languages, Elihu Burritt could do the same in forty. "Those who have been acquainted with my character from my youth up," said he, writing to a friend, "will give me credit for sincerity when I say, that it never entered into my head to blazon forth any acquisition of my own . . . All that I have accomplished, or expect, or hope to accomplish, has been and will be by that plodding, patient, persevering process of accretion which builds the ant-heap,—particle by particle, thought by thought, fact by fact. And if ever I

was actuated by ambition, its highest and warmest aspiration reached no further than the hope to set before the young men of my country an example in employing those invaluable fragments of time called 'odd moments.'"

Daguesseau, one of the great Chancellors of France, by carefully working up his odd bits of time, wrote a bulky and able volume in the successive intervals of waiting for dinner; and Madame de Genlis composed several of her charming volumes while waiting for the princess to whom she gave her daily lessons. Jeremy Bentham in like manner disposed of his hours of labour and repose, so that not a moment should be lost, the arrangement being determined on the principle that it is a calamity to lose the smallest portion of time. He lived and worked habitually under the practical consciousness that man's days are numbered, and that the night cometh when no man can work.

What a solemn and striking admonition to youth is that inscribed on the dial at All Souls, Oxford—"Periunt et imputantur"—the hours perish, and are laid to our charge. For time, like life, can never be recalled. Melancthon noted down the time lost by him, that he might thereby reanimate his industry, and not lose an hour. An Italian scholar put over his door an inscription intimating that whosoever remained there should join in his labours. "We are afraid," said some visitors to Baxter, "that we break in upon your time." "To be sure you do," replied the disturbed and blunt divine. Time was the estate out of which these great workers, and all other workers, carved a rich inheritance of thoughts and deeds for their successors.

The mere drudgery undergone by some men in carrying on their undertakings has been something extraordinary, but the drudgery they regarded as the price of success. Addison amassed as much as three folios of manuscript materials before he began his 'Spectator.' Newton wrote his 'Chronology' fifteen times over before he was satisfied with it; and Gibbon wrote out his 'Memoir' nine times.

Hale studied for many years at the rate of sixteen hours a day, and when wearied with the study of the law, he would recreate himself with philosophy and the study of the mathematics. Hume wrote thirteen hours a day while preparing his 'History of England.' Montesquieu, speaking of one part of his writings, said to a friend, "You will read it in a few hours; but I assure you it cost me so much labour that it has whitened my hair."

The practice of writing down thoughts and facts for the purpose of holding them fast, and preventing their escape into the dim region of forgetfulness, has been much resorted to by thoughtful and studious men. Lord Bacon left behind him many manuscripts, entitled "Sudden thoughts set down for use." Erskine made great extracts from Burke; and Eldon copied Coke upon Littleton twice over with his own hand, so that the book became, as it were, part of his own mind. The late Dr. Pye Smith, when apprenticed to his father as a bookbinder, was accustomed to make copious memoranda of all the books he read, with extracts and criticisms. This indomitable industry in collecting materials distinguished him through life, his biographer describing him as "always at work, always in advance, always accumulating." These note-books afterwards proved, like Richter's "quarries," the great storehouse from which he drew his illustrations.

The same practice characterized the eminent John Hunter, who adopted it for the purpose of supplying the defects of memory; and he was accustomed thus to illustrate the advantages which one derives from putting one's thoughts in writing: "It resembles," he said, "a tradesman taking stock, without which he never knows either what he possesses or in what he is deficient." John Hunter—whose observation was so keen that Abernethy was accustomed to speak of him as "the Argus-eyed"—furnished an illustrious example of the power of patient industry. He received little or no education till he was about twenty years of age, and it was with difficulty that he acquired the

arts of reading and writing. He worked for some years as a common carpenter at Glasgow, after which he joined his brother William, settled in London as a lecturer and anatomical demonstrator. John entered his dissecting room as an assistant, but soon shot ahead of his brother, partly by virtue of his great natural ability, but mainly by reason of his patient application and indefatigable industry. He was one of the first in this country to devote himself assiduously to the study of comparative anatomy, and the objects he dissected and collected took the eminent Professor Owen no less than ten years to arrange. The collection contains some twenty thousand specimens, and is the most precious treasure of the kind that has ever been accumulated by the industry of one man. Hunter used to spend every morning from sun-rise till eight o'clock in his museum; and throughout the day he carried on his extensive private practice, performed his laborious duties as surgeon to St. George's Hospital and deputy surgeon-general to the army; delivered lectures to students, and superintended a school of practical anatomy at his own house; finding leisure, amidst all, for elaborate experiments on the animal economy, and the composition of various works of great scientific importance. To find time for this gigantic amount of work, he allowed himself only four hours of sleep at night, and an hour after dinner. When once asked what method he had adopted to ensure success in his undertakings, he replied, "My rule is, deliberately to consider, before I commence, whether the thing be practicable. If it be not practicable, I do not attempt it. If it be practicable, I can accomplish it if I give sufficient pains to it; and having begun, I never stop till the thing is done. To this rule I owe all my success."

John Hunter occupied a great deal of his time in collecting definite facts respecting matters which, before his day, were regarded as exceedingly trivial. Thus it was supposed by many of his contemporaries that he was only wasting his time and thought in studying so carefully as he

did the growth of a deer's horn. But Hunter was impressed with the conviction that no accurate knowledge of scientific facts is without its value. By the study referred to, he learnt how arteries accommodate themselves to circumstances and enlarge as occasion requires; and the knowledge thus acquired emboldened him, in a case of aneurism in a branch artery, to tie the main trunk where no surgeon before him had dared to tie it, and the life of his patient was saved. Like many original men, he worked for a long time as it were underground, digging and laying foundations. He was a solitary and self-reliant genius, holding on his course without the solace of sympathy or approbation,—for but few of his contemporaries perceived the ultimate object of his pursuits. But like all true workers, he did not fail in securing his best reward—that which depends less upon others than upon one's self—that approval of conscience, which in a right-minded man invariably follows the honest and vigorous performance of duty.

Harvey was another labourer of great perseverance in the same field of science. He spent not less than eight long years of investigation and research before he published his views of the circulation of the blood. He repeated and verified his experiments again and again, probably anticipating the opposition he would have to encounter from the profession on making known his discovery. The tract in which he at length announced his views, was a most modest one,—but simple, perspicuous, and conclusive. It was nevertheless received with ridicule, as the utterance of a crack-brained impostor. For some time, he did not make a single convert, and gained nothing but contumely and abuse. He had called in question the revered authority of the ancients; and it was even averred that his views were calculated to subvert the authority of the Scriptures and undermine the very foundations of morality and religion. His little practice fell away, and he was left almost without a friend. This lasted for some years, until the great truth held fast by Harvey amidst all his adversity, and which had

dropped into many thoughtful minds, gradually ripened by further observation, and after a period of about twenty-five years, it became generally recognised as an established scientific truth.

The difficulties encountered by Dr. Jenner in promulgating and establishing his discovery of vaccination as a preventive of small-pox, were even greater than those of Harvey. Many, before him, had witnessed the cow-pox, and had heard of the report current among the milkmaids in Gloucestershire, that whoever had taken that disease was secure against small-pox. It was a trifling, vulgar rumour, supposed to have no significance whatever; and no one had thought it worthy of investigation, until it was accidentally brought under the notice of Jenner. He was a youth, pursuing his studies at Sodbury, when his attention was arrested by the casual observation made by a country girl who came to his master's shop for advice. The small-pox was mentioned, when the girl said, "I can't take that disease, for I have had cow-pox." The observation immediately riveted Jenner's attention, and he forthwith set about inquiring and making observations on the subject. His professional friends, to whom he mentioned his views as to the prophylactic virtues of cow-pox, laughed at him, and even threatened to expel him from their society, if he persisted in harassing them with the subject. In London he was so fortunate as to study under John Hunter, to whom he communicated his views. The advice of the great anatomist was thoroughly characteristic: "Don't think, but *try*; be patient, be accurate." Jenner's courage was greatly supported by the advice, which conveyed to him the true art of philosophical investigation. He went back to the country to practise his profession, and carefully to make observations and experiments, which he continued to pursue for a period of twenty years. His faith in his discovery was so implicit that he vaccinated his own son on three several occasions. At length he published his views in a quarto of about seventy pages, in which he gave the details

of twenty-three cases of successful vaccination of individuals, to whom it was found afterwards impossible to communicate the small-pox either by contagion or inoculation. It was in 1798 that this treatise was published; though he had been working out his ideas as long before as 1775, when they began to assume a definite form. —

How was the discovery received? First with indifference, then with active hostility. He proceeded to London to exhibit to the profession the process of vaccination and its successful results; but not a single doctor could be got to make a trial of it, and after fruitlessly waiting for nearly three months, Jenner returned to his native village. He was even caricatured and abused for his attempt to “bestialize” his species by the introduction into their systems of diseased matter from the cow’s udder. Cobbett was one of his most furious assailants. Vaccination was denounced from the pulpit as “diabolical.” It was averred that vaccinated children became “ox-faced,” that abscesses broke out to “indicate sprouting horns,” and that the countenance was gradually “transmuted into the visage of a cow, the voice into the bellowing of bulls.” Vaccination, however, was a truth, and notwithstanding the violence of the opposition, belief in it spread slowly. In one village, where a gentleman tried to introduce the practice, the first persons who permitted themselves to be vaccinated were absolutely pelted, and were driven into their houses if they appeared out of doors. Two ladies of title—Lady Ducie and the Countess of Berkeley—to their honour be it remembered—had the courage to vaccinate their own children; and the prejudices of the day were at once broken through. The medical profession gradually came round, and there were several who even sought to rob Dr. Jenner of the merit of the discovery, when its vast importance came to be recognised. Jenner’s cause at last triumphed, and he was publicly honoured and rewarded. In his prosperity he was as modest as he had been in his obscurity. He was invited to settle in London, and told that he might command a prac-

tice of 10,000*l.* a year. But his answer was, "No! In the morning of my days I have sought the sequestered and lowly paths of life—the valley, and not the mountain,—and now, in the evening of my days, it is not meet for me to hold myself up as an object for fortune and for fame." In Jenner's own life-time the practice of vaccination had been adopted all over the civilized world; and when he died, his title as a Benefactor of his kind was recognised far and wide. Cuvier has said, "If vaccine were the only discovery of the epoch, it would serve to render it illustrious for ever."

Not less patient, resolute, and persevering, was Sir Charles Bell in the prosecution of his discoveries relating to the nervous system. Previous to his time, the most confused notions prevailed as to the functions of the nerves, and this branch of study was little more advanced than it had been in the times of Democritus and Anaxagoras three thousand years before. Sir Charles Bell, in the valuable series of papers the publication of which was commenced in 1821, took an entirely original view of the subject, based upon a long series of careful, accurate, and oft-repeated experiments. Elaborately tracing the development of the nervous system up from the lowest order of animated being, to man—the lord of the animal kingdom,—he displayed it, to use his own words, "as plainly as if it were written in our mother-tongue." His great discovery consisted in the fact, that the spinal nerves are double in their function, and arise by double roots from the spinal marrow,—volition being conveyed by that part of the nerves springing from the one root, and sensation by the other. The whole subject occupied the mind of Sir Charles Bell for a period of forty years, when, in 1840, he laid his last paper before the Royal Society. As in the cases of Harvey and Jenner, when he had lived down the ridicule and opposition with which his views were first received, and their truth came to be recognised, numerous claimants for priority in making the discovery were set up both at home and abroad.

Like them, too, he lost practice by the publication of his valuable papers; and he left it on record that, after every step in his discovery, he was obliged to work harder than ever to preserve his reputation as a practitioner. The great merits of Sir Charles Bell were, however, at length fully recognised; and Cuvier himself, when on his death-bed, finding his face distorted and drawn to one side, pointed it out to his attendants as a proof of the correctness of Sir Charles Bell's theory.

The late Dr. Marshall Hall was an equally devoted pursuer of the same branch of science. He was the son of Mr. Robert Hall, of Basford, near Nottingham, to whom the manufacturing industry of this country owes so much, as the inventor of bleaching by chlorine on a large scale, by which a process was accomplished in a few hours that had formerly required as many weeks. It is remarkable that Mr. Hall's neighbours designated the place where he first made his attempt by the name of "Bedlam," which it still retains.* To Mr. Hall's second son Samuel, Nottingham owes in a great measure its present commercial prosperity and importance, arising from his inventions of the process of gassing lace, and the bleaching of starch, by which the Nottingham cotton fabrics are scarcely distinguishable from the linen-thread lace of the Continent. Mr. Hall's fourth son was the celebrated physician and physiologist, Dr. Marshall Hall, whose name posterity will rank with those of Harvey, Hunter, Jenner, and Bell. During the whole course of his long and useful life he was a most careful and minute observer; and no fact,

* Baron Liebig, in his 'Letters on Chemistry' (3rd ed., p. 28), says, "But for this new bleaching process, it would scarcely have been possible for the cotton manufacture of Great Britain to have attained its present enormous extent;—it could not have competed in prices with France and Germany. In the old process of bleaching, every piece must be exposed to the air during several weeks in the summer, and kept continually moist by manual labour. For this purpose meadow-land, eligibly situated, was essential. Now, a single establishment near Glasgow bleaches 1400 pieces daily throughout the year. What an enormous capital would be required to purchase land for this purpose in England!"

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however apparently insignificant, escaped his attention. His important discovery of the diastaltic nervous system, by which his name will long be known amongst scientific men, originated in an exceedingly simple circumstance. When investigating the pneumonic circulation in the Triton, the decapitated object lay upon the table; and on separating the tail and accidentally pricking the external integument, he observed that it moved with energy, and became contorted into various forms. He had not touched a muscle nor a muscular nerve; what then was the nature of these movements? The same phenomena had probably often before been observed, but Dr. Hall was the first to apply himself perseveringly to the investigation of their causes; and he exclaimed on the occasion, "I will never rest satisfied until I have found all this out, and made it clear." His attention to the subject was almost incessant; and it is estimated that in the course of his life he devoted not less than 25,000 hours to its experimental and chemical investigation; at the same time he was carrying on an extensive private practice, and officiating as a lecturer at St. Thomas's Hospital and other Medical Schools. It will scarcely be credited that the paper in which he embodied his discovery was rejected by the Royal Society, and was only accepted after the lapse of seventeen years, when the truth of his views had become acknowledged by scientific men both at home and abroad. A character so manly and beautiful as that of Dr. Marshall Hall, so hopeful and persevering under difficulties, so truth-loving and sincere in all things, is so profitable a subject for contemplation and study, that we rejoice to learn there is a probability of his memory being shortly embalmed in a biography, which we doubt not will be worthy of him. 620

The life of Sir William Herschel affords another remarkable illustration of the force of perseverance in another branch of science. His father was a poor German musician, who brought up his four sons to the same calling. William came over to England to seek his fortune, and he joined the 216

band of the Durham Militia, in which he played the oboe. The regiment was lying at Doncaster, where Dr. Miller first became acquainted with Herschel, having heard him perform a solo on the violin in a surprising manner. The Doctor entered into conversation with the youth, and was so pleased with him, that he urged him to leave the militia band and take up his residence at his house for a time. Herschel did so, and while at Doncaster was principally occupied in violin-playing at concerts, availing himself of the advantages of Dr. Miller's library to study in his leisure hours. A new organ having been built for the parish church of Halifax, an organist was advertised for, on which Herschel applied for the office, and was selected. While officiating as organist and music-teacher at Halifax, he began to study mathematics, unassisted by any master. Leading the wandering life of an artist, he was next attracted to Bath, where he played in the Pump-room band, and also officiated as organist in the Octagon chapel. Some recent discoveries in astronomy having arrested his mind, and awakened in him a powerful spirit of curiosity, he sought and obtained from a friend the loan of a two-foot Gregorian telescope. So fascinated was the poor musician by the science, that he even thought of purchasing a telescope, but the price asked by the London optician was so alarming, that he determined to make one. Those who know what a reflecting telescope is, and the skill which is required to prepare the concave metallic speculum which forms the most important part of the apparatus, will be able to form some idea of the difficulty of this undertaking. Nevertheless, Herschel succeeded, after long and painful labour, in completing a five-foot reflector, with which he had the gratification of observing the ring and satellites of Saturn. Not satisfied with this triumph, he proceeded to make other instruments in succession, of seven, ten, and even twenty feet. In constructing the seven-foot reflector, he finished no fewer than two hundred specula before he produced one that would bear any power that was applied to it,—a striking instance

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of the persevering laboriousness of the man. While sublimely gauging the heavens with his instruments, he continued patiently to earn his bread by piping to the fashionable frequenters of the Bath Pump-room. So eager was he in his astronomical observations, that he would steal away from the room during an interval of the performance, give a little turn to his telescope, and contentedly return to his oboe. Thus working away, Herschel discovered the Georgium Sidus, the orbit and rate of motion of which he carefully calculated, and sent the result to the Royal Society; when the humble oboe player found himself at once elevated from obscurity to fame. He was shortly after appointed Astronomer Royal, and by the kindness of George III. was placed in a position of honourable competency for life. He bore his honours with the same meekness and humility which had distinguished him in the days of his obscurity. So gentle and patient, and withal so distinguished and successful a follower of science under difficulties, perhaps does not occur in the whole range of biography.

The career of William Smith, the father of English geology, though perhaps less known, is no less interesting and instructive as an example of patient and laborious effort, and the diligent cultivation of opportunities. He was born in 1769, the son of a yeoman farmer at Churchill, in Oxfordshire. His father dying when he was but a child, he received a very sparing education at the village school, and even that was to a considerable extent interfered with by his wandering and somewhat idle habits as a boy. His mother having married a second time, he was taken in charge by an uncle, also a farmer, by whom he was brought up. Though the uncle was by no means pleased with the boy's love of wandering about, collecting "poundstones," "pundips," and other stony curiosities which lay scattered about the adjoining land, he yet enabled him to purchase a few of the necessary books wherewith to instruct himself in the rudiments of geometry and surveying; for the boy was already destined

for the business of a land-surveyor. One of his marked characteristics, even as a youth, was the accuracy and keenness of his observation; and what he once clearly saw he never forgot. He began to draw, attempted to colour, and practised himself in the arts of mensuration and surveying, all without regular instruction; and by his own efforts in self-culture, he shortly became so proficient, that he was taken on as assistant to a local surveyor of some ability, himself self-taught, who was engaged in extensive surveys of the neighbourhood. This position introduced William Smith to considerable experience as a surveyor, and in the course of his business he was constantly under the necessity of traversing Oxfordshire and the adjoining counties. One of the first things that he seriously pondered, was the position of the various soils and strata that came under his notice on the lands which he surveyed or travelled over; more especially the position of the red earth in regard to the lias and superincumbent rocks. The surveys of various collieries which he was called upon to conduct in the course of his business in 1792 and 1793, gave him further experience; and even at this early period, when he was only 23 years of age, he seems to have contemplated making a model of the strata of the earth. ✓

About this time many plans for new canals were on foot, and Mr. Smith, with a keen eye for business, took steps to qualify himself for canal surveying. It was while engaged in levelling for a proposed canal in Gloucestershire, that the idea of a general law occurred to him, relating to the strata of the district. He conceived that the strata lying above the coal were not laid horizontally, but inclined, and in one direction, towards the east; resembling, on a large scale, "the ordinary appearance of superposed slices of bread and butter." The correctness of this theory he shortly after confirmed by the levelling processes executed by him in two parallel valleys, the strata of "red ground," "lias," and "freestone" or "oolite," being found to come down in an eastern direction, and to sink below the level,

yielding place to the next in succession. He was shortly after enabled to verify the truth of his views on a larger scale, having been appointed to examine personally into the management of canals in England and Wales, immediately on the passing of the Canal Bill on which he had been engaged. During his journey, which extended from Bath to Newcastle-on-Tyne, returning by Shropshire and Wales, his keen eyes were never idle for a moment. He rapidly noted the aspect and structure of the country through which he passed with his companions, treasuring up his observations for future use. His geologic vision was so acute, that though the road along which he passed from York to Newcastle in the post chaise was from five to fifteen miles distant from the hills of chalk and oolite on the east, he was satisfied as to their nature, by their contours and relative position, and their ranges on the surface in relation to the lias and "red ground" occasionally seen on the road.

The general results of his observation seem to have been these. He noted that the rocky masses of country in the western parts of England generally inclined to the east and south-east; that the red sandstones and marls above the coal measures passed beneath the lias, clay, and limestone, that these again passed beneath the sands, yellow limestones, and clays, forming the table-land of the Cotteswold Hills, while these in turn passed beneath the great chalk deposits, occupying the eastern parts of England. He further observed, that each layer of clay, sand, and limestone, held its own peculiar classes of fossils; and pondering much on these things, he at length came to the then unheard-of conclusion, that each distinct deposit of marine animals, in these several strata, indicated a distinct sea-bottom, and that each layer of clay, sand, chalk, and stone marked a distinct epoch of time in the history of the earth.

This idea took firm possession of his mind, and he could talk and think of nothing else. At canal boards, at sheep-

shearings, at county meetings, and at agricultural associations, 'Strata Smith,' as he came to be called, was always running over with the subject that possessed him. He had indeed made a great discovery, though he was as yet a man utterly unknown in the scientific world. He now projected the preparation of a map of the stratification of England; but he was for the present deterred from proceeding with it, his time being wholly occupied in carrying out the works of the Somersetshire coal canal, which engaged him for a period of about six years. He continued, nevertheless, to be unremitting in his observation of facts, and he became so expert in apprehending the internal structure of a district, and detecting the lie of the strata from its external configuration, that he was often consulted respecting the drainage of extensive tracts of land, in which, guided by his geological knowledge, he proved remarkably successful, and acquired an extensive reputation.

One day, when looking over the cabinet collection of fossils belonging to the Rev. Samuel Richardson, at Bath, Smith astonished his friend by suddenly disarranging his classification, and rapidly re-arranging the fossils in their stratigraphical order—"These came from the blue lias, these from the over-lying sand and freestone, these from the fuller's earth, and these from the Bath building stone." A new light flashed upon Mr. Richardson's mind, and he shortly became a convert to and believer in William Smith's doctrine. But the geologists of that day were not so easily convinced; and it was scarcely to be tolerated that an unknown country land surveyor should pretend to teach them the science of geology. But William Smith had an eye and mind to penetrate deep beneath the skin of the earth; he saw its very fibre and skeleton, and as it were divined its organization. His knowledge of the strata in the neighbourhood of Bath was so accurate, that one evening, when dining at the house of the Rev. Joseph Townsend, he dictated to Mr. Richardson the different strata according to their order of succession in descending order, twenty-three

in number, commencing with the chalk and descending in continuous series down to the coal, below which the strata were not then sufficiently determined. To this was added a list of the more remarkable fossils which had been gathered in the several layers of rock. This was printed and extensively circulated in 1801.

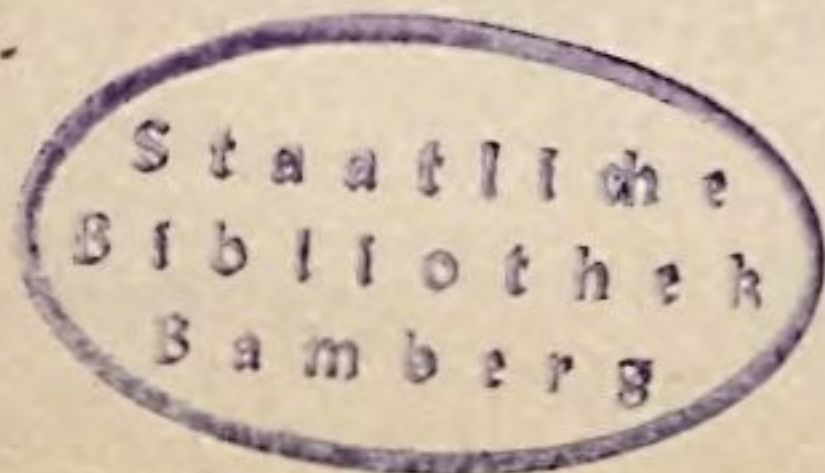
He next determined to trace out the strata through districts as remote from Bath as his means would enable him to reach. For years he journeyed to and fro, sometimes on foot, sometimes on horseback, riding upon the tops of stage coaches, often making up by night travelling the time he had lost by day, so as not to fail in his ordinary business engagements. When he was professionally called away to any distance from home—as for instance, when travelling from Bath to Holkham, in Norfolk, to direct the irrigation and drainage of Mr. Coke's land in that county—he rode on horseback, making frequent detours from the road to note the geological features of the country which he traversed.

For several years he was thus engaged in his journeys to distant quarters in England and Ireland, to the extent of upwards of ten thousand miles yearly; and it was amidst this incessant and laborious travelling, that he contrived to commit to paper his fast-growing generalizations on what he rightly regarded as a new science. No observation, howsoever trivial it might appear, was neglected, and no opportunity of collecting fresh facts was overlooked. Whenever he could, he possessed himself of records of borings, natural and artificial sections, drew them to a constant scale of eight yards to the inch, and coloured them up. Of his keenness of observation take the following illustration. When making one of his geological excursions about the country near Woburn, as he was drawing near to the foot of the Dunstable chalk hills, he observed to his companion, "If there be any broken ground about the foot of these hills, we may find *shark's teeth*;" and they had not proceeded far, before they picked up six from the white bank of a new fence-ditch. As he afterwards said of himself, "The habit

of observation crept on me, gained a settlement in my mind, became a constant associate of my life, and started up in activity at the first thoughts of a journey ; so that I generally went off well prepared with maps, and sometimes with contemplations on its objects, or on those on the road, reduced to writing before it commenced. My mind was, therefore, like the canvass of a painter, well prepared for the first and best impressions."

Notwithstanding his courageous and indefatigable industry, many circumstances contributed to prevent the promised publication of William Smith's 'Map of the Strata of England and Wales,' and it was not until 1814 that he was enabled, by the assistance of some friends, to give to the world the fruits of his twenty years' incessant labour. To prosecute his inquiries and collect the extensive series of facts and observations requisite for his purpose, he had to devote the profits of all his professional labours during that period ; he even sold off his small property to obtain the means of visiting remote parts of the island. He had also entered on a quarrying speculation near Bath, which proved unsuccessful, and he was under the necessity of even selling off his valuable geological collection (which was purchased by the British Museum), his furniture and library, reserving only his papers, maps, and sections, which were useless save to himself. He bore his losses and misfortunes with exemplary fortitude ; and amidst all, he went on working with cheerful courage and untiring patience. The later years of his life were spent in engineering and surveying pursuits in the north of England, acting also as land steward to Sir J. V. B. Johnstone, of Hackness, near Scarborough. He died at Northampton, in August, 1839, while on his way to attend the meeting of the British Association at Birmingham.

It is difficult to speak in terms of too high praise of the first geological map of England, which we owe to the industry of this courageous man of science. An accomplished writer says of it, "It was a work so masterly in



conception and so correct in general outline, that in principle it served as a basis not only for the production of later maps of the British Islands, but for geological maps of all other parts of the world, wherever they have been undertaken. In the apartments of the Geological Society Smith's map may yet be seen—a great historical document, old and worn, calling for renewal of its faded tints. Let any one conversant with the subject compare it with later works on a similar scale, and he will find that in all essential features it will not suffer by the comparison—the intricate anatomy of the Silurian rocks of Wales and the north of England by Murchison and Sedgwick being the chief additions made to his great generalizations.* But the genius of the Oxfordshire surveyor did not fail to be duly recognised and honoured by men of science during his lifetime. In 1831 the Geological Society of London awarded to him the Wollaston medal, “in consideration of his being a great original discoverer in English geology, and especially for his being the first in this country to discover and to teach the identification of strata, and to determine their succession by means of their imbedded fossils.” William Smith, in his simple earnest way, gained for himself a name as lasting as the science he loved so well. To use the words of the writer above quoted, “Till the manner as well as the fact of the first appearance of successive forms of life shall be solved, it is not easy to surmise how any discovery can be made in geology equal in value to that which we owe to the genius of William Smith.”

Hugh Miller was a man of similar calibre, of equally simple tastes and observant faculties, who also successfully devoted himself to geological pursuits. The book in which he has himself told the story of his life, (*My Schools and Schoolmasters*), is extremely interesting, and calculated to be eminently useful. It is the history of the formation of a truly noble and independent character in the humblest condition of life—the condition in which a large

* Saturday Review, July 3rd, 1858.

mass of the people of this country are born and brought up ; and it teaches all, but especially poor men, what it is in the power of each to accomplish for himself. The life of Hugh Miller is full of lessons of self-help and self-respect, and shows the efficacy of these in working out for a man an honourable competence and a solid reputation. His father was drowned at sea when he was but a child, and he was left to be brought up by his widowed mother. He had a school training after a sort, but his best teachers were the boys with whom he played, the men amongst whom he worked, and the friends and relatives with whom he lived. He read much and miscellaneously, and gleaned pickings of odd knowledge from many odd quarters,—from workmen, carpenters, fishermen and sailors, old women, and above all, from the old boulders strewed along the shores of the Cromarty Frith. With a big hammer which had belonged to his great grandfather, an old buccaneer, the boy went about chipping the stones, and thus early accumulating specimens of mica, porphyry, garnet, and such like. Sometimes he had a day in the woods, and there, too, the boy's attention was excited by the peculiar geological curiosities which lay in his way. While searching among the stones and rocks on the beach, he was sometimes asked, in humble irony, by the farm servants who came to load their carts with sea-weed, whether he “ was gettin' siller in the stanes,” but was so unlucky as never to be able to answer their question in the affirmative. His uncles were anxious that he should become a minister ; for it is the ambition of many of the aspiring Scotch poor, to see one of their family “ wag his pow in a poopit.” These kind uncles were even willing to pay his college expenses, though the labour of their hands formed their only wealth. The youth, however, had conscientious objections : he did not feel *called* to the ministry ; and the uncles, confessing that he was right, gave up their point. Hugh was accordingly apprenticed to the trade of his choice—that of a working stone-mason ; and he began his labouring career in a quarry looking out upon

the Cromarty Frith. This quarry proved one of his best schools. The remarkable geological formations which it displayed awakened his curiosity. The bar of deep-red stone beneath, and the bar of pale-red clay above, were noted by the young quarryman, who even in such unpromising subjects found matter for observation and reflection. Where other men saw nothing, he detected analogies, differences, and peculiarities, which set him a-thinking. He simply kept his eyes and his mind open; was sober, diligent, and persevering; and this was the secret of his intellectual growth.

His curiosity was excited and kept alive by the curious organic remains, principally of old and extinct species of fishes, ferns, and ammonites, which lay revealed along the coasts by the washings of the waves, or were exposed by the stroke of his mason's hammer. He never lost sight of this subject; went on accumulating observations, comparing formations, until at length, when no longer a working mason, many years afterwards, he gave to the world his highly interesting work on the Old Red Sandstone, which at once established his reputation as a scientific geologist. But this work was the fruit of long years of patient observation and research. As he modestly states in his autobiography, "the only merit to which I lay claim in the case is that of patient research—a merit in which whoever wills may rival or surpass me; and this humble faculty of patience, when rightly developed, may lead to more extraordinary developments of idea than even genius itself."

The late John Brown, the eminent English geologist, was, like Miller, a stone-mason in his early life, serving an apprenticeship to the trade at Colchester, and afterwards working as a journeyman mason at Norwich. He subsequently commenced business as a builder on his own account at Colchester, where by frugality and industry he secured an independency. It was while working at his trade that his attention was first drawn to the study of fossils and shells;

and he proceeded to make a collection of them, which afterwards grew into one of the finest in England. His researches along the coasts of Essex, Kent, and Sussex brought to light some magnificent remains of the elephant and rhinoceros, the most valuable of which were presented by him to the British Museum. During the last few years of his life he devoted considerable attention to the study of the Foraminifera in chalk, respecting which he made several interesting discoveries. His life was useful, happy, and honoured; and he died at Stanway, in Essex, in November 1859, at the ripe age of eighty years.

Sir Roderick Murchison is another illustrious pursuer of the same branch of science. A writer in the 'Quarterly Review' cites him as "a singular instance of a man who having passed the early part of his life as a soldier, never having had the advantage, or disadvantage as the case might have been, of a scientific training, instead of remaining a fox-hunting country gentleman, has succeeded by his own native vigour and sagacity, untiring industry and zeal, in making for himself a scientific reputation that is as wide as it is likely to be lasting. He took first of all an unexplored and difficult district at home, and, by the labour of many years, examined its rock-formations, classed them in natural groups, assigned to each its characteristic assemblage of fossils, and was the first to decipher two great chapters in the world's geological history, which must always henceforth carry his name on their title-page. Not only so, but he applied the knowledge thus acquired to the dissection of large districts, both at home and abroad, so as to become the geological discoverer of great countries which had formerly been '*terræ incognitæ*.'" But Sir Roderick Murchison is not merely a geologist. His indefatigable labours in many branches of knowledge, have contributed to render him among the most accomplished and complete of scientific men.

CHAPTER V.

WORKERS IN ART.

“If what shone afar so grand,
Turn to nothing in thy hand,
On again, the virtue lies
In the struggle, not the prize.”—*R. M. Milnes.*

SIR JOSHUA REYNOLDS was such a believer in the force of industry, that he held that excellence in art, “however expressed by genius, taste, or the gift of heaven, may be acquired.” Writing to Barry he said, “Whoever is resolved to excel in painting, or indeed any other art, must bring all his mind to bear upon that one object from the moment that he rises till he goes to bed.” And on another occasion he said, “Those who are resolved to excel must go to their work, willing or unwilling, morning, noon, and night: they will find it no play, but very hard labour.” But although diligent application is no doubt absolutely necessary for the achievement of the highest distinction in art, it is equally true that without the inherent faculty, no mere amount of industry, however well applied, will make an artist. The gift comes by nature, but is perfected by self-culture, which is of much more avail than the imparted education of the schools.

It is indeed remarkable that the most distinguished artists of our own country have not been born in an artistic sphere, or in a position of life more than ordinarily favourable to the culture of artistic genius. They have nearly all had to force their way upward in the face of poverty and manifold obstructions. Thus Gainsborough and Bacon

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were the sons of cloth-workers; Barry was an Irish sailor boy, and Maclise a banker's apprentice at Cork; Opie and Romney, like Inigo Jones, were carpenters; West was the son of a small Quaker farmer in Pennsylvania; Northcote was a watchmaker, Jackson a tailor, and Etty a printer; Reynolds, Wilson, and Wilkie, were the sons of clergymen; Lawrence was the son of a publican, and Turner of a barber. Several of our painters, it is true, originally had some connection with art, though in a very humble way,—such as Flaxman, whose father sold plaster casts; Bird, who ornamented tea-trays; Martin, who was a coach-painter; Wright and Gilpin, who were ship-painters; Chantrey, who was a carver and gilder; and David Cox, Stanfield, and Roberts, who were scene-painters.

All these men achieved distinction in their several walks under circumstances often of the most adverse kind. It was not by luck nor accident that they rose, but by sheer industry and hard work. Though some achieved wealth, yet this was never their ruling motive. Indeed, no mere love of money could sustain the efforts of the artist in his early career of self-denial and application. The pleasure of the pursuit has always been its best reward; the wealth which followed but an accident. Many noble-minded artists have preferred following the bent of their genius, to chaffering with the public for terms. Spagnoletto verified in his life the beautiful fiction of Xenophon, and after he had acquired the means of luxury, preferred withdrawing himself from their influence, and voluntarily returned to poverty and labour. When Michael Angelo was asked his opinion respecting a work which a painter had taken great pains to exhibit for profit, he said, "I think that he will be a poor fellow so long as he shows such an extreme eagerness to become rich."

Like Sir Joshua Reynolds, Michael Angelo was a great believer in the force of labour; and he held that there was nothing which the imagination conceived, that could not be embodied in marble, if the hand were made vigorously

to obey the mind. He was himself one of the most indefatigable of workers; and he attributed his power of studying for a greater number of hours than most of his contemporaries, to his spare habits of living. A little bread and wine was all he required for the chief part of the day when employed at his work; and very frequently he rose in the middle of the night to resume his labours. On these occasions, it was his practice to fix the candle, by the light of which he worked, on the summit of a paste-board cap which he wore. Sometimes he was too wearied to undress, and he slept in his clothes, ready to spring to his work so soon as refreshed by sleep. He had a favourite device of an old man in a go-cart, with an hour-glass upon it bearing the inscription, *Ancora imparo!* still I am learning.

Titian, also, was an indefatigable worker. His celebrated "Pietro Martire" was eight years in hand, and his "Last Supper" seven. In his letter to Charles V. he said, "I send your Majesty the 'Last Supper' after working at it almost daily for seven years—*dopo sette anni lavorandovi quasi continuamente.*" Few think of the patient labour and long training involved in the greatest works of the artist. They seem easy and quickly accomplished, yet with how great difficulty has this ease been acquired. "You charge me fifty sequins," said the Venetian nobleman to the sculptor, "for a bust that cost you only ten days' labour." "You forget," said the artist, "that I have been thirty years learning to make that bust in ten days." Once when Domenichino was blamed for his slowness in finishing a picture which was bespoken, he made answer, "I am continually painting it within myself." It was eminently characteristic of the industry of the late Sir Augustus Callcott, that he made not fewer than forty separate sketches in the composition of his famous picture of "Rochester." This constant repetition is one of the main conditions of success in art, as in life itself.

Art is indeed a long labour, no matter how amply nature has bestowed the gift of the artistic faculty. In most

cases this has shown itself early; and illustrations of apparent precocity have been noted in the lives of most great artists. The anecdote related of West is well known. When only seven years old, struck with the beauty of the sleeping infant of his eldest sister whilst watching by its cradle, he ran to seek some paper and forthwith drew its portrait in red and black ink. The little incident revealed the artist in him, and it was found impossible to draw him from his bent. West might have been a greater painter, had he not been injured by too early success: his fame, though great, was not purchased by study, trials, and difficulties, and it has not been enduring. Richard Wilson, when a mere child, indulged himself with tracing figures of men and animals on the walls of his father's house, with a burnt stick. He first directed his attention to portrait painting; but when in Italy, calling one day at the house of Zucarelli, and growing weary with waiting, he began painting the scene on which his friend's chamber window looked. When Zucarelli arrived, he was so charmed with the picture, that he asked if Wilson had not studied landscape, to which he replied that he had not. "Then, I advise you," said the other, "to try; for you are sure of great success." Wilson adopted the advice, studied and worked hard, and became our first great English landscape painter. Sir Joshua Reynolds, when a boy, forgot his lessons, and took pleasure only in drawing, for which his father was accustomed to rebuke him. The boy was destined for the profession of physic, but his strong instinct for art could not be repressed, and he became a painter. Gainsborough went sketching, when a schoolboy, in the woods of Sudbury; and at twelve he was a confirmed artist: he was a keen observer and a hard worker,—no picturesque feature of any scene he had once looked upon, escaping his diligent pencil. William Blake, a hosier's son, employed himself in drawing designs on the backs of his father's shop-bills and making sketches on the counter. Edward Bird, when a child only three or four years old, would

mount a chair and draw figures on the walls, which he called French and English soldiers. A box of colours was purchased for him, and his father, desirous of turning his love of art to account, put him apprentice to a maker of tea-trays! Out of this trade he gradually raised himself by study and labour, to the rank of a Royal Academician.

Hogarth, though a very dull boy at his lessons, took pleasure in making drawings of the letters of the alphabet, and his school exercises were more remarkable for the ornaments with which he embellished them, than for the matter of the exercises themselves. In the latter respect he was beaten by all the blockheads of the school, but in his adornments he stood alone. His father put him apprentice to a silversmith, where he learnt to draw, and also to engrave spoons and forks with crests and ciphers: from silver-chasing, he went on to teach himself to engrave on copper, principally griffins and monsters of heraldry; in the course of which practice he became ambitious to delineate the varieties of human character. The singular excellence which he reached in this art, was mainly the result of careful observation and study. He had the gift, which he sedulously cultivated, of committing to memory the precise features of any remarkable face, and afterwards reproducing it on paper; but if any singularly fantastic form or *outré* face came in his way, he would make a sketch of it on the spot, upon his thumb-nail, and carry it home to expand at his leisure. Everything fantastical and original had a powerful attraction for him, and he wandered into many out-of-the-way places for the purpose of meeting with character. By this careful storing of his mind, he was afterwards enabled to crowd an immense amount of thought and treasured observation into his works. Hence it is that Hogarth's pictures are so truthful a memorial of the characters, the manners, and even the very thoughts of the times in which he lived. True painting, he himself observed, can only be learnt in one school, and that is kept by Nature. But he was not a highly cultivated man,

except in his own walk. His school education had been of the slenderest kind, scarcely even perfecting him in the art of spelling; his self-culture did the rest. For a long time he was in very straitened circumstances, but, nevertheless, worked on with a cheerful heart. Poor though he was, he contrived to live within his small means, and he boasted, with becoming pride, that he was "a punctual paymaster." When he had conquered all his difficulties and become a famous and thriving man, he loved to dwell upon his early labours and privations, and to fight over again the battle which ended so honourably to him as a man and so gloriously as an artist. "I remember the time," said he on one occasion, "when I have gone moping into the city with scarce a shilling, but as soon as I have received ten guineas there for a plate, I have returned home, put on my sword, and sallied out with all the confidence of a man who had thousands in his pockets."

"Industry and perseverance" was the motto of the sculptor Banks, which he acted on himself, and strongly recommended to others. His well-known kindness induced many aspiring youths to call upon him and ask for his advice and assistance; and it is related that one day a boy called at his door to see him with this object, but the servant, angry at the loud knock he had given, scolded him, and was about sending him away, when Banks overhearing her, himself went out. The little boy stood at the door with some drawings in his hand. "What do you want with me?" asked the sculptor. "I want, sir, if you please, to be admitted to draw at the Academy." Banks explained that he himself could not procure his admission, but he asked to look at the boy's drawings. Examining them, he said, "Time enough for the Academy, my little man! go home—mind your schooling—try to make a better drawing of the Apollo—and in a month come again and let me see it." The boy went home—sketched and worked with redoubled diligence—and, at the end of the month, called again on the sculptor. The drawing was better but again

Banks sent him back, with good advice, to work and study. In a week the boy was again at his door; his drawing much improved; and Banks bid him be of good cheer, for if spared he would distinguish himself. The boy was Mulready; and the sculptor's augury was amply fulfilled.

Though Nollekens came of a family of artists, his father died so young, and he was left so destitute, that it was necessary for him to fight his own way in the world inch by inch. He had not much school education, could read indifferently, and had little knowledge of spelling or grammar; yet he became a successful, if not a great, artist. He was taken into the shop of an obscure sculptor, Scheemakers, and while labouring late and early at his favourite art, he ran errands during the day, being often employed, because of his carefulness, to carry pots of porter for his master's maids on washing days,—“creeping slowly along,” as he afterwards described, “to save the head of foam, that the lasses might taste it in all its strength.” As he grew in knowledge of his art, he competed for the Society of Arts prizes, and won them in two successive years. Determined to visit Rome, he journeyed thither in the humblest style possible, and reached the Eternal City with only twenty guineas in his pocket, without a friend. But he set to work with a will; he first earned ten guineas for a bas-relief carved in stone, and the year following he was voted fifty guineas by the Society of Arts for a marble group. Garrick and Sterne both sat to him for their busts at Rome, which brought him more guineas, and, what was better for him, reputation; and when he returned to London to commence business, he had already accumulated a little store of capital,—for his privations as a youth had early forced him to cultivate the habit of economy. He improved as an artist, and Dr. Johnson, of whom he executed a capital bust, once said of him, “My friend Joe Nollekens can chop out a head with any of them.” Yet Nollekens was no genius, for his biographers confess that all which

he accomplished came by painful labour and incessant diligence.

John Flaxman was a true genius—one of the greatest artists England has yet produced. He was besides a person of beautiful character, his life furnishing many salutary lessons for men of all ranks. Flaxman was the son of a humble seller of plaster casts in New Street, Covent Garden; and when a child, he was so constant an invalid that it was his custom to sit behind the shop counter propped by pillows, amusing himself with drawing and reading. A benevolent clergyman, named Matthews, one day calling at the shop, found the boy trying to read a book, and on inquiring what it was, found it was a *Cornelius Nepos*, which his father had picked up for a few pence at a bookstall. The gentleman, after some conversation with the boy, said that was not the proper book for him to read, but that he would bring him a right one on the morrow; and the kind man was as good as his word. The Rev. Mr. Matthews used afterwards to say, that from that casual interview with the cripple little invalid behind the plaster-cast seller's shop counter, began an acquaintance which ripened into one of the best friendships of his life. He brought several books to the boy, amongst which were *Homer* and '*Don Quixote*,' in both of which Flaxman then and ever after took immense delight. His mind was soon full of the heroism which breathed through the pages of the former work, and, with the stucco *Ajaxes* and *Achilleses* about him, looming along the shop shelves, the ambition thus early took possession of him, that he too would design and embody in poetic forms those majestic heroes. His black chalk was at once in his hand, and the enthusiastic boy laboured in a divine despair to body forth in visible shapes the actions of the Greeks and Trojans.

Like all youthful efforts, his first designs were crude. The proud father one day showed them to Roubilliac, the sculptor, who turned from them with a contemptuous "pshaw!" But the boy had the right stuff in him; he had

industry and patience; and he continued to labour incessantly at his books and drawings. He then tried his young powers in modelling figures in plaster of Paris, wax, and clay; some of these early works are still preserved, not because of their merit, but because they are curious as the first healthy efforts of patient genius. The boy was long before he could walk, and he only learned to do so by hobbling along upon crutches. Hence he could not accompany his father to see the procession at the coronation of George III., but he entreated his father to bring him back one of the coronation medals which were to be distributed amongst the crowd. The pressure was too great to enable the father to obtain one in the scramble, but, not to disappoint the little invalid, he obtained a plated button bearing the stamp of a horse and jockey, which he presented to his son as the coronation medal. His practice at this time was to make impressions of all seals and medals that pleased him; and it was for this that he so much coveted the medal.

His physical health improving, the little Flaxman then threw away his crutches. The kind Mr. Matthews invited him to his house, where his wife explained Homer and Milton to him. They helped him also in his self-culture—giving him lessons in Greek and Latin, the study of which he prosecuted at home. When under Mrs. Matthews, he also attempted with his bit of charcoal to embody in outline on paper such passages as struck his fancy. His drawings could not, however, have been very extraordinary, for when he showed a drawing of an eye which he had made, to Mortimer, the artist, that gentleman with affected surprise, exclaimed, “Is it an oyster?” The sensitive boy was much hurt, and for a time took care to avoid showing his drawings to artists, who, though a thin-skinned race, are sometimes disposed to be very savage in their criticisms on others. At length, by dint of perseverance and study, his drawing improved so much that Mrs. Matthews obtained a commission for him from a lady, to draw six original

drawings in black chalk of subjects in Homer. His first commission! A great event that in the boy's life. A surgeon's first fee, a lawyer's first retainer, a legislator's first speech, a singer's first appearance behind the foot lights, an author's first book, are not any of them more full of interest to the individual than the artist's first commission. The boy duly executed the order, and was both well praised and well paid for his work.

At fifteen Flaxman entered a student at the Royal Academy. He might then be seen principally in the company of Blake and Stothard, young men of kindred tastes and genius, gentle and amiable, yet ardent in their love of art. Notwithstanding his retiring disposition, Flaxman soon became known among the students, and great things were expected of him. Nor were their expectations disappointed: in his fifteenth year he gained the silver prize, and next year he became a candidate for the gold one. Everybody prophesied that he would carry off the medal, for there was none who surpassed him in ability and industry. The youth did his best, and in his after life honestly affirmed that he deserved the prize, but he lost it, and the gold medal was adjudged to Engleheart, who was not afterwards heard of. This failure on the part of the youth was really of service to him; for defeats do not long cast down the resolute-hearted, but only serve to call forth their real powers. "Give me time," said he to his father, "and I will yet produce works that the Academy will be proud to recognise." He redoubled his efforts, spared no pains, designed and modelled incessantly, and consequently made steady if not rapid progress. But meanwhile poverty threatened his father's household; the plaster-cast trade yielded a very bare living; and young Flaxman, with resolute self-denial, curtailed his hours of study, and devoted himself to helping his father in the humble details of his business. He laid aside his Homer to take up the plaster-trowel. He was willing to work in the humblest department of the trade so that his father's family might be

supported, and the wolf kept from the door. To this drudgery of his art he served a long apprenticeship; but it did him good. It familiarised him with steady work, and cultivated in him the spirit of patience. The discipline may have been rough, but it was wholesome.

Happily, young Flaxman's skill in design had reached the knowledge of Mr. Wedgwood, who sought him out for the purpose of employing him in designing improved patterns of china and earthenware to be produced at his manufactory. It may seem a humble department of art for Flaxman to have laboured in; but it really was not so. An artist may be labouring truly in his vocation while designing even so common an article as a teapot or a water-jug; articles which are in daily use amongst the people, and are before their eyes at every meal, may be made the vehicles of art-education to all and minister to their highest culture. The most ambitious artist may thus confer a greater practical benefit on his countrymen than by executing an elaborate work which he may sell for thousands of pounds, to be placed in some wealthy man's gallery, where it is hidden away from public sight. Before Wedgwood's time the designs which figured upon our china and stoneware were hideous both in drawing and execution, and he determined to improve both. Finding out Flaxman, he said to him: "Well, my lad, I have heard that you are a good draughtsman and clever designer. I'm a manufacturer of pots—name Wedgwood. Now, I want you to design some models for me—nothing fantastic, but simple, tasteful, and correct in drawing. I'll pay you well. You don't think the work beneath you?" "By no means, sir," replied Flaxman, "indeed the work is quite to my taste. Give me a few days—call again, and you will see what I can do." "That's right—work away. Mind, I am in want of them now. They are for pots of all kinds—teapots, jugs, teacups and saucers. But especially I want designs for a table-service. Begin with that. I mean to supply one for the royal table. Now, think of that, young man. What you

design is meant for the eyes of royalty!" "I will do my best, sir, I assure you." And the kind gentleman bustled out of the shop as he had come in.

Flaxman did his best. By the time that Mr. Wedgwood next called upon him, he had a numerous series of models prepared for various pieces of earthenware. They consisted chiefly of small groups in very low relief—the subjects taken from ancient verse and history. Many of them are still in existence, and some are equal in beauty and simplicity to his after designs for marble. The celebrated Etruscan vases, many of which were to be found in public museums and in the cabinets of the curious, furnished him with the best examples of form, and these he embellished with his own elegant devices. 'Stuart's Athens,' then recently published, also furnished him with specimens of the purest-shaped Greek utensils, and he was not slow to adopt the best of them, and work them up into new and wondrous shapes of elegance and beauty. Flaxman then saw that he was labouring in a great work—no less than the promotion of popular education; and he was proud, in after life, to allude to these his early labours, by which he was enabled at the same time to cultivate his love of the beautiful, to diffuse a taste for art among the people, and to replenish his own purse, while he promoted the prosperity of his friend and benefactor.

Engaged in such labours as these, for several years Flaxman executed but few works of art, and then at rare intervals. He lived a quiet, secluded, and simple life, working during the day, and sketching and reading in the evenings. He was so poor that he had as yet been only able to find plaster of Paris for his works—marble was too dear a material for him. He had hitherto executed only one statue in the latter material, and that was a commission.

At length, in the year 1782, when twenty-seven years of age, he quitted his father's roof and rented a small house and studio in Wardour Street, Soho; and what was more, he married—Ann Denman was the name of his wife—

and a cheery, bright-souled, noble woman she was. He believed that in marrying her he should be able to work with an intenser spirit; for, like him, she had a taste for poetry and art; and besides was an enthusiastic admirer of her husband's genius. Yet when Sir Joshua Reynolds—himself a bachelor—met Flaxman shortly after his marriage, he said to him, "So, Flaxman, I am told you are married; if so, sir, I tell you you are ruined for an artist." Flaxman went straight home, sat down beside his wife, took her hand in his, and said, "Ann, I am ruined for an artist." "How so, John? How has it happened? and who has done it?" "It happened," he replied, "in the church, and Ann Denman has done it." He then told her of Sir Joshua's remark—whose opinion was well known, and had often been expressed, that if students would excel they must bring the whole powers of their mind to bear upon their art, from the moment they rise until they go to bed; and also, that no man could be a *great* artist unless he studied the grand works of Raffaele, Michael Angelo, and others, at Rome and Florence. "And I," said Flaxman, drawing up his little figure to its full height, "*I* would be a great artist." "And a great artist you shall be," said his wife, "and visit Rome too, if that be really necessary to make you great." "But how?" asked Flaxman. "*Work and economize*," rejoined the brave wife; "I will never have it said that Ann Denman ruined John Flaxman for an artist." And so it was determined by the pair that the journey to Rome was to be made when their means would admit. "I will go to Rome," said Flaxman, "and shew the President that wedlock is for a man's good rather than his harm; and you, Ann, shall accompany me."

Patiently and happily this affectionate couple plodded on during five years in that humble little home in Wardour Street; always with the long journey to Rome before them. It was never lost sight of for a moment, and not a penny was uselessly spent that could be saved towards the necessary expenses. They said no word to any one about their

project; solicited no aid from the Academy; but trusted only to their own patient labour and love to pursue and achieve their object. During this time Flaxman exhibited very few works. He could not afford marble to experiment in original designs; but he obtained frequent commissions for monuments, by the profits of which he maintained himself. He still worked for the Messrs. Wedgwood, who proved good paymasters; and, on the whole, he was thriving, happy, and hopeful. He was not a little respected by his neighbours, and those who knew him greatly estimated his sincerity, his honesty, and his unostentatious piety. His local respectability was even such as to bring local honours and local work upon him; so much so that he was on one occasion selected by the ratepayers to collect the watch-rate for the parish of St. Anne, when he might be seen going about with an ink-bottle suspended from his button-hole, collecting the money.

At length Flaxman and his wife, having thriftily accumulated a sufficient store of savings, set out for Rome. Arrived there, he applied himself diligently to study, maintaining himself, like other poor artists, by making copies from the antique. English visitors sought his studio, and gave him commissions; and it was then that he composed his beautiful designs illustrative of Homer, Æschylus, and Dante. The price paid for them was moderate—only fifteen shillings a-piece; but Flaxman worked for art as well as money; and the beauty of the designs brought him new friends and patrons. He executed Cupid and Aurora for the munificent Thomas Hope, and the Fury of Athamas for the Earl of Bristol. He then prepared to return to England, his taste improved and cultivated by careful study; but before he left Italy, the Academies of Florence and Carrara recognised his merit by electing him a member.

His fame had preceded him to England, and he soon found abundant lucrative employment. While at Rome, he had been commissioned to execute his famous monument in memory of Lord Mansfield, and it was erected in the north

transept of Westminster Abbey shortly after his return. It stands there in majestic grandeur, a monument to the genius of Flaxman himself—calm, simple, and severe. No wonder that Banks, the sculptor, then in the heyday of his fame, exclaimed when he saw it, “This little man cuts us all out!

When the bigwigs of the Royal Academy heard of Flaxman’s return, and especially when they had an opportunity of seeing and admiring his noble portrait-statue of Mansfield, they were eager to have him enrolled among their number. The Royal Academy has always had the art of running to the help of the strong; and when an artist has proved that he can achieve a reputation without the Academy, then is the Academy most willing to “patronize” him. He allowed his name to be proposed in the candidates’ list of associates, and was immediately elected. His progress was now rapid, and he was constantly employed. Perseverance and study, which had matured his genius, had made him great, and he went on from triumph to triumph. But he appeared in yet a new character. The little boy who had begun his studies behind the poor plaster-cast-seller’s shop-counter in New Street, Covent Garden, was now, a man of high intellect and recognised supremacy in art, to instruct aspiring students, in the character of Professor of Sculpture to the Royal Academy! And no man better deserved to fill that distinguished office; for none is so able to instruct others as he who, for himself and by his own almost unaided efforts, has learnt to grapple with, and overcome difficulties. The caustic Fuseli used to talk of the lectures as “sermons by the Reverend John Flaxman;” for the sculptor was a religious man, which Fuseli was not. But Flaxman acquitted himself well in the professorial chair, as any one who reads his instructive ‘Lectures on Sculpture,’ now published, may ascertain for himself.

Flaxman’s monuments are known nearly all over England. Their mute poetry beautifies most of our cathedrals, and many of our rural churches. Whatever work of this kind

he executed, he threw a soul and meaning into it, embodying some high Christian idea of charity, of love, of resignation, of affection, or of kindness. In monuments such as these his peculiar genius pre-eminently shone. There is a tenderness and grace about them which no other artist has been able to surpass, or even to equal. His rapid sketches illustrative of the Lord's Prayer, published in lithograph some years ago, exhibit this peculiar quality of his genius in a striking light. In historical monuments, again, he was less successful, though his monuments to Reynolds and Nelson, in St. Paul's Cathedral, are noble works, which will always be admired.

After a long, peaceful, and happy life, Flaxman found himself growing old. The loss which he sustained by the death of his affectionate wife Ann, was a severe shock to him; but he survived her several years, during which he executed his celebrated "Shield of Achilles" and his noble "Archangel Michael vanquishing Satan,"—perhaps his two greatest works.

Chantrey was a more robust man—every inch of him English. He was somewhat rough but hearty in his demeanour; proud of his successful struggle with the difficulties which beset him in early life; and, above all, proud of his independence. He was born a poor man's child, at Norton, near Sheffield. His father dying when he was a mere boy, his mother married again. Young Chantrey used to drive an ass laden with milk-cans across its back into the neighbouring town of Sheffield, and there serve his mother's customers with milk. Such was the humble beginning of his industrial career; and it was by his own strength that he rose from that position, and achieved the highest eminence as an artist. Not taking kindly to his step-father, the boy was sent to trade, and was first placed with a grocer in Sheffield. The business was very distasteful to him; but, passing a carver's shop window one day, his eye was attracted by the glittering articles it contained, and, charmed with the idea of being a carver, he begged to be released from the

grocery business with this object. His friends consented, and he was bound apprentice to a carver and gilder for seven years. His new master, besides being a carver in wood, was also a dealer in prints and plaster models; and Chantrey at once set about imitating both, studying with great industry and energy. All his spare hours were devoted to drawing, modelling, and self-improvement, often working far into the night. Before his apprenticeship was out—at the age of twenty-one—he paid over to his master the whole wealth which he was able to muster—a sum of 50*l.*—to cancel his indentures, determined to devote himself to the career of an artist. He then made the best of his way to London, and, with characteristic good sense, sought employment as an assistant carver, studying painting and modelling at his bye-hours. Amongst the jobs on which he was at that time employed as a journeyman carver, was the decoration of the dining-room of Mr. Rogers, the poet—a room in which he was in after life a welcome visitor; and he usually took pleasure in pointing out his early handywork to the guests whom he met at his friend's table.

Returning to Sheffield on a professional visit, he advertised himself in the local papers as a painter of portraits in crayons and miniatures, and also in oil. For his first portrait he was paid a well-earned guinea by a cutler; and for a portrait in oil, a confectioner paid him as much as 5*l.* and a pair of top boots! Chantrey was soon in London again, to study at the Royal Academy; and next time he returned to Sheffield he advertised himself as ready to model plaster busts of his townsmen, as well as to paint portraits of them. He was even selected to design a monument to a deceased vicar of the town, and executed it to general satisfaction. When in London he used a room over a stable as a studio, and there he modelled his first original work for exhibition. It was a gigantic head of Satan. Towards the close of Chantrey's life, a friend passing through his studio was struck by this model lying in a

corner. "That head," said the sculptor, "was the first thing that I did after I came to London. I worked at it in a garret, with a paper cap on my head; and as I could then afford only one candle, I stuck that one in my cap that it might move along with me, and give me light whichever way I turned." Flaxman saw and admired this head at the Academy Exhibition, and recommended Chantrey for the execution of the busts of four admirals, required for the Naval Asylum at Greenwich. This commission led to others, and painting was given up. But for eight years before, he had not earned 5*l.* by his modelling. His famous head of Horne Tooke was such a success that, according to his own account, it brought him commissions amounting to 12,000*l.*

Chantrey had now succeeded, but he had worked hard, and thoroughly earned his fortune. He was selected from amongst sixteen competitors to execute the statue of George III. for the city of London. A few years later, he produced the exquisite monument of the Sleeping Children, now in Lichfield Cathedral,—a work not to be surpassed for tenderness of sentiment and poetic beauty; and thenceforward his career was one of increasing honour, fame, and prosperity. His patience, industry, and steady perseverance were the means by which he achieved his greatness. Nature endowed him with genius, and his sound sense enabled him to employ the precious gift as a blessing. He was prudent and shrewd, like the men amongst whom he was born; the pocket-book which accompanied him on his Italian tour containing mingled notes on art, records of daily expenses, and the current prices of marble. His tastes were simple, and he made his finest subjects great by the mere force of simplicity. His statue of Watt, in Handsworth church, seems to us the very consummation of art; yet it is perfectly artless and simple. His generosity to brother artists in need was splendid, but quiet and unostentatious. In a word, Chantrey was a national sculptor; and the character and career of the man were such as to

make Englishmen justly proud of him. The fortune which he amassed during his life of hard work he bequeathed to the Royal Academy for the promotion of British art.

The same honest and persistent industry was throughout distinctive of the career of David Wilkie. The son of a poor Scotch minister, he gave early indications of an artistic turn; and though he was a negligent and inapt scholar, he was a sedulous drawer of faces and figures. A silent boy, he already displayed that quiet concentrated energy of character which distinguished him through life. He was always on the look-out for an opportunity to draw,—and the walls of the manse, or the smooth sand by the river side, came alike convenient for his purpose. Any sort of tool would serve him; like Giotto, he found a pencil in a burnt stick, a prepared canvas in any smooth stone, and the subject for a picture in every ragged mendicant he met. When he visited a house, he generally left his mark on the walls as an indication of his presence, sometimes to the disgust of cleanly housewives. In short, notwithstanding the aversion of his father, the minister, to the “sinful” profession of painting, Wilkie’s strong propensity was not to be thwarted, and he became an artist; working his way manfully up the steep of difficulty. Though rejected on his first application as a candidate for admission to the Scottish Academy, at Edinburgh, on account of the rudeness and inaccuracy of his introductory specimens, he persevered in producing better, until he was admitted. But his progress was slow. He applied himself diligently to the drawing of the human figure, and held on with the determination to succeed, as if with a resolute confidence in the result. He displayed none of the eccentric humour and fitful application of many youths who conceive themselves geniuses, but kept up the routine of steady application to such an extent that he himself was afterwards accustomed to attribute his success to his dogged perseverance rather than to any higher innate power. “The single element,” he said, “in all the progressive movements of my pencil was

persevering industry." At Edinburgh he gained a few premiums, thought of turning his attention to portrait painting, with a view to its higher and more certain remuneration, but eventually went boldly into the line in which he earned his fame,—and painted his *Pitlessie Fair*. What was bolder still, he determined to proceed to London, on account of its presenting so much wider a field for study and work; and the poor Scotch lad arrived in town, and painted his *Village Politicians* while living in a humble lodging on eighteen shillings a week.

Notwithstanding the success of this picture, and the commissions which followed it, Wilkie long continued poor. The prices which his works realized were not great, for he bestowed upon them so much time and labour, that his earnings continued comparatively small for many years. Every picture was carefully studied and elaborated beforehand; nothing was struck off at a heat; many occupied him for years—touching, retouching, and improving them until they finally passed out of his hands. As with Reynolds, his motto was "Work! work! work!" and, like him, he expressed great dislike for talking artists. Talkers may sow, but the silent reap. "Let us be *doing* something," was his oblique mode of rebuking the loquacious and admonishing the idle. He once related to his friend Constable that when he studied at the Scottish Academy, Graham, the master of it, was accustomed to say to the students, in the words of Reynolds, "If you have genius, industry will improve it; if you have none, industry will supply its place." "So," said Wilkie, "I was determined to be very industrious, for I knew I had no genius." He also told Constable that when Linnell and Burnett, his fellow-students in London, were talking about art, he always contrived to get as close to them as he could to hear all they said, "for," said he, "they know a great deal, and I know very little." This was said with perfect sincerity, for Wilkie was habitually modest. One of the first things that he did with the small sum of thirty pounds

which he obtained from Lord Mansfield for his Village Politicians, was to buy a present—of bonnets, shawls, and dresses—for his mother and sister at home; though but little able to afford it at the time. Wilkie's early poverty had trained him in habits of strict economy, which were, however, consistent with a noble liberality, as appears from sundry passages in the Autobiography of Abraham Raimbach the engraver.

William Etty was another notable instance of unflagging industry and indomitable perseverance in art. His father was a ginger-bread and spicemaker at York, and his mother—a woman of considerable force and originality of character—was the daughter of a ropemaker. The boy early displayed a love of drawing, covering walls, floors, and tables with specimens of his skill; his first crayon being a farthing's worth of chalk, and this giving place to a piece of coal or a bit of charred stick. His mother, knowing nothing of art, put the boy apprentice to a trade—that of a printer. But in his leisure hours he went on with the practice of drawing; and when his time was out he determined to follow his bent—he would be a painter and nothing else. Fortunately his uncle and elder brother were able and willing to help him on in his new career, and they provided him with the means of entering a pupil at the Royal Academy. We observe, from Leslie's Autobiography, that Etty was looked upon by his fellow-students as a worthy but dull, plodding person, who would never distinguish himself. But he had in him the divine faculty of work, and diligently plodded his way upward to eminence in the very highest walks of art.

Turner, our greatest landscape painter, was intended by his father for his own trade of a barber, which he carried on in Maiden Lane, until one day the sketch which the boy had made of a coat of arms on a silver salver having attracted the notice of a customer whom his father was shaving, he was urged to allow his son to follow his bias, and he was eventually permitted to follow art as a profes

sion. He learnt its first rudiments with Malton, who had at the same time under him another pupil, Thomas Girtin, whose genius was akin to Turner's, and kept alive in him that ardent spirit of emulation and industry which never ceased to be his distinguishing characteristic, even after he had attained the summit of his fame. Girtin and Turner, though essentially unlike in character and disposition, were warmly attached friends, and, when poor Girtin died, full of promise, under thirty, he had no more affectionate mourner than his fellow pupil and competitor. Like all young artists, Turner had many difficulties to encounter, and they were all the greater that Turner's circumstances were so straitened. But he was always willing to work, and to take pains with his work, no matter howsoever humble it might be. He was glad to hire himself out at half-a-crown a night to wash in skies in Indian ink upon other people's drawings, getting his supper into the bargain. Thus he earned money and acquired expertness. Then he took to illustrating guide-books, almanacs, and any sort of books that wanted cheap frontispieces. "What could I have done better?" said he afterwards; "it was first-rate practice." He did everything carefully and conscientiously, never slurring over his work because he was ill-remunerated for it. He aimed at learning as well as living; always doing his best, and never leaving a drawing without having made a step in advance upon his previous work. A man who thus laboured was sure to do much; and his advance in power and grasp of thought was, to use Ruskin's words, "as steady as the increasing light of sunrise." But Turner's genius needs no panegyric; his best monument is the great works bequeathed by him to the nation, which will ever be the most lasting memorial of his fame.

Many artists have had to encounter privations which have tried their courage and endurance to the utmost before they succeeded. What number may have sunk under them we can never know. Martin encountered difficulties in the course of his career such as perhaps fall

to the lot of few. More than once he found himself on the verge of starvation whilst engaged on his first great picture. It is related of him that on one occasion he found himself reduced to his last shilling—a *bright* shilling—which he had kept because of its very brightness, but at length he found it necessary to exchange it for bread. He went to a baker's shop, bought a loaf, and was taking it away, when the baker snatched it from him, and tossed back the shilling to the starving painter. The bright shilling had failed him in his hour of need—it was a bad one! Returning to his lodgings, he rummaged his trunk for some remaining crust to satisfy his hunger. Upheld throughout by the victorious power of enthusiasm, he pursued his design with unsubdued energy. He had the courage to work on and to wait; and when, a few days after, he found an opportunity to exhibit his picture, he was from that time famous. Like many other great artists, his life proves that, in despite of outward circumstances, genius, aided by industry, will be its own protector, and that fame, though she comes late, will never ultimately refuse her favours to real merit.

The most careful discipline and training after academic methods will fail in making an artist, unless he himself take an active part in the work. Like every highly cultivated man, he must be mainly self-educated. When Pugin, who was brought up in his father's office, had learnt all that he could learn of architecture according to the usual formulas, he still found that he had learnt but little; and that he must begin at the beginning, and pass through the discipline of labour. Young Pugin accordingly hired himself out as a common carpenter at Covent Garden Theatre—first working under the stage, then behind the flies, then upon the stage itself. He thus acquired a familiarity with work, and cultivated an architectural taste, to which the diversity of the mechanical employment about a large operative establishment is peculiarly favourable. When the theatre closed for the season, he worked a sailing-ship be-

tween London and some of the French ports, carrying on at the same time a profitable trade. At every opportunity he would land and make drawings of any old building, and especially of any ecclesiastical structure which fell in his way. Afterwards he would make special journeys to the Continent for the same purpose, and returned home laden with drawings. Thus he plodded and laboured on, making sure of the distinction and excellence which he eventually achieved.

A similar illustration of plodding industry in the same walk is presented in the career of George Kemp, the architect of the beautiful Scott Monument at Edinburgh. He was the son of a poor shepherd, who pursued his calling on the southern slope of the Pentland Hills. Amidst that pastoral solitude the boy had no opportunity of enjoying the contemplation of beautiful works of art. It happened, however, that in his tenth year he was sent on a message to Roslin, by the farmer for whom his father herded sheep, and the sight of the beautiful castle and chapel there seems to have made a vivid and enduring impression on his mind. Probably to enable him to indulge his love of architectural construction, the boy besought his father to let him be a joiner; and he was accordingly put apprentice to a neighbouring village carpenter. Having served his time, he went to Galashiels to seek work, doing the journey on foot. As he was plodding along the valley of the Tweed with his tools upon his back, a carriage overtook him near Elibank Tower; and the coachman, doubtless at the suggestion of his master, who rode alone inside, having asked the youth how far he had to walk, and learning that he was on his way to Galashiels, invited him to mount the box beside him, and thus to ride thither. It turned out that the kindly gentleman inside was no other than Sir Walter Scott, then travelling on his official duty as Sheriff of Selkirkshire. Whilst working at his trade at Galashiels, Kemp had frequent opportunities of visiting Melrose, Dryburgh, and Jedburgh Abbeys, and studying them care-

fully. Inspired by his love of architecture, he next worked his way, as a carpenter, over the greater part of the north of England, never omitting an opportunity of inspecting and making sketches of any fine Gothic building. On one occasion, when working at his trade in Lancashire, he walked fifty miles to York, spent a week in carefully examining the Minster, and returned in like manner on foot. We next find him in Glasgow, where he remained four years, studying the fine cathedral there during his spare time. He returned to England again, this time working his way further south; studying Canterbury, Winchester, Tintern, and other well-known structures. In 1824 he formed the design of travelling over Europe with the same object, supporting himself by his trade. He commenced at Boulogne, and from thence proceeded by Abbeville and Beauvais to Paris, spending a few weeks, making drawings and studies, in each place. His skill as a mechanic, and especially his knowledge of mill-work, readily secured him employment wherever he went; and he was thus enabled to choose his site of employment, which was invariably in the neighbourhood of some fine old Gothic structure, in studying which he occupied his leisure hours. After a year's working, travel, and study abroad, he was abruptly summoned home by family affairs, and returned to Scotland. He continued his studies, and became a proficient in drawing and perspective: Melrose was his favourite ruin; and he produced several elaborate drawings of the building, one of which, exhibiting it in a "restored" state, was afterwards engraved. He also obtained some employment as a modeller of architectural designs; and afterwards made drawings for a work commenced by an Edinburgh engraver, after the plan of Britton's 'Cathedral Antiquities.' This was a task most congenial to his tastes, and he laboured at it with an enthusiasm which ensured its rapid advance; walking on foot for this purpose over half Scotland, and living as an ordinary mechanic, whilst executing drawings which would

have done credit to the greatest masters in the art. The projector of the work having died suddenly, its publication was interfered with, and Kemp sought other employment. Few knew of the genius of this man—for he was exceedingly taciturn and habitually modest—when the Committee of the Scott Monument offered a prize for the best design. The competitors were numerous—including some of the greatest names in classical architecture; but the design unanimously selected was that of George Kemp, then working at Kilwinning Abbey in Ayrshire, many miles off, when the letter reached him intimating the decision of the committee. Poor Kemp! Shortly after this event he met an untimely death, and did not live to see the first result of his indefatigable industry and self-culture embodied in stone,—one of the most beautiful and appropriate memorials ever erected to literary genius.

Among living artists, who have honourably fought their way upwards from poverty to fame, we may mention John Gibson,—a man full of a genuine enthusiasm and love of his art, which place him high above those sordid temptations which urge meaner natures to make time the measure of profit. He was born at Gyffn, near Conway, in North Wales—the son of a gardener. He early showed indications of his talent by the carvings in wood which he made by means of a common pocket knife; and his father, noting the direction of his talent and wisely improving the circumstance, sent him to Liverpool and bound the boy apprentice to a cabinet-maker and wood-carver. He rapidly improved at his trade, and some of his carvings were much admired. He was naturally led onwards to sculpture, and when eighteen years of age, he modelled a small figure of Time in wax, which attracted considerable notice. The Messrs. Franceys, sculptors, of Liverpool, purchased the boy's indentures, and took him as their apprentice for six years, during which his remarkable genius displayed itself in many pure and original works.

From thence he proceeded to London, and afterwards to Rome ; and his fame is now European.

Robert Thorburn, another Royal Academician, like John Gibson, was born of poor parents. His father was a shoemaker in a very humble way of business, in the town of Dumfries, in Scotland. Besides Robert there were two other sons ; one of whom is still noted in his native town as a skilful carver in wood. One day a lady called at the shoemaker's, and found Robert, then a mere boy, engaged in drawing upon a stool which served him for a table. She examined his work, and finding that he had abilities in this direction, interested herself in obtaining for him some occupation in drawing, and enlisted in his behalf the services of others who could assist him in prosecuting the study of art. The boy was very diligent, pains-taking, staid, and silent, mixing little with his companions, and forming but few intimacies. About the year 1830, some gentlemen of the town provided Thorburn with the means of proceeding to Edinburgh, where he was admitted student of the Scottish Academy. There he had the advantage of studying under competent masters, and the progress which he made was rapid and decided. After residing in Edinburgh for some years, he removed to London, where, we understand, he had the advantage of being introduced to notice under the patronage of the Duke of Buccleuch. We need scarcely say, however, that of whatever use patronage may have been to Thorburn in giving him an introduction to the best circles, patronage of no kind could have made him the great artist that he unquestionably is, without native genius and diligent application.

Noel Paton, another well-known painter, began his artistic career at Dunfermline and Paisley, as a drawer of patterns for table-cloths and muslin embroidered by hand ; meanwhile working diligently at higher artistic studies, including the human figure. He was, like Turner, ready to turn his hand to any kind of work, and in 1840, when a mere youth, we find him engaged, among his other labours, in

illustrating the 'Renfrewshire Annual.' He worked his way step by step, slowly, yet surely; but he remained unknown until the exhibition of the prize cartoons painted for the Houses of Parliament, when his picture of the Spirit of Religion (for which he obtained one of the first prizes) revealed him to the world as a genuine artist; and the works which he has since exhibited—such as the 'Reconciliation of Oberon and Titania,' 'Home,' and 'The bluidy Tryste'—have shown a steady advance in artistic power and culture.

But perhaps the most striking exemplification of perseverance and industry in the cultivation of art is found in the career of James Sharples, the working blacksmith of Blackburn. He was born at Wakefield in Yorkshire, in 1825, one of a family of thirteen children. His father was a working ironfounder, and removed to Bury to follow his business, while his family were still young. The boys received no school education, but were all sent to work as soon as they were able; and at about ten James was placed in the foundry of the Messrs. Lees, Cousins, and Diggles, where he was employed for about two years as a smithy-boy. After that he was sent into the engine-shop of the Messrs. Clarkson and Kay, where his father worked as an engine-smith. The boy's employment was to heat and carry rivets for the boiler-makers. Though his hours of labour were very long—often from six in the morning until eight at night—his father contrived to give him some little teaching after work hours; and it was thus that he partially learned his letters. An incident occurred in the course of his employment among the boiler-makers, which first awakened in him the desire to learn drawing. He had occasionally been employed by the foreman to hold the chalked line with which he made the designs of boilers upon the floor of the workshop; and on such occasions the foreman was accustomed to hold the line, and direct the boy to make the necessary dimensions. James soon became so expert at this as to be of considerable service to the

foreman; and at his leisure hours at home his great delight was to practise drawing designs of boilers upon his mother's floor. On one occasion, when his mother's aunt was expected from Manchester to pay the family a visit, and the house had been made as decent as possible for her reception, the boy, on coming in from the foundry in the evening, immediately began his usual operations upon the floor. He had proceeded some way with his design of a large boiler in chalk, when his mother arrived with the visitor, and to her dismay found the boy unwashed and the floor chalked all over. The aunt, however, professed to be pleased with the boy's industry, praised his design, and recommended his mother to provide "the little sweep," as she called him, with paper and pencils.

His elder brother, being like himself disposed to be industrious in the evenings after the day's work was over, occupied himself in mechanical drawing; and he recommended James to practise figure and landscape drawing. He accordingly began to make copies of lithographs, but remained altogether ignorant of the rules of perspective and the principles of light and shade. He worked away, however, and gradually acquired expertness in copying. At sixteen he entered the Bury Mechanics' Institution for the purpose of attending the drawing class, which was taught by an amateur artist who followed the trade of a barber. There he had one lesson a week during three months. The teacher recommended him to obtain from the library Burnet's 'Practical Treatise on Painting;' but as he could not yet read with ease, he was under the necessity of getting his mother, and sometimes his elder brother, to read passages from the book for him, while he sat by and listened. Feeling himself hampered by his ignorance of the art of reading, and eager to master the contents of Burnet's book, he ceased attending the drawing class at the Mechanics' Institute after the first quarter, and diligently devoted himself to learn reading and writing at home. In this he soon succeeded; and when he again

joined the Institution for another quarter, and took out 'Burnet' a second time, he was not only able to read it, but to make written extracts for future use. So ardently did he study the volume, that he used to rise at four o'clock in the morning to read it and copy out passages; after which he went to the foundry at six, worked until six and sometimes eight in the evening; and returned home to enter with fresh zest upon the study of Burnet, which he continued very often until a late hour. Part of his nights were also occupied in drawing and making copies of drawings. On one of these—a copy of Leonardo da Vinci's "Last Supper"—he spent an entire night. He went to bed indeed, but his mind was so engrossed with the subject that he could not sleep, and rose again to resume his pencil.

He next proceeded to try his hand at painting in oil, for which purpose he procured some canvas from a draper's shop, stretched it on a frame, coated it over with white lead, and began painting upon it with colours bought from a house-painter. But his work proved a total failure; for the canvas was rough and knotty, and the paint would not dry. In this extremity he applied to his old teacher, the barber, from whom he first learnt that prepared canvas was to be had, and that there were colours and varnishes made for the special purpose of oil-painting. As soon, therefore, as his means would allow, he bought a small stock of the necessary articles and began afresh,—his amateur master showing him how to paint; and the pupil succeeded so well that he excelled the master's copy. His first picture was a copy from an engraving called "Sheep-shearing," and was afterwards sold by him for half-a-crown. Aided by a shilling Guide to Oil-painting, he went on working at his leisure hours, and gradually acquired a better knowledge of his materials. He made his own easel and palette, palette-knife, and paint-chest; and he bought his paint, brushes, and canvas, as he could raise the money by working over-time. This was the slender fund which his parents consented to allow him for the purpose; the

burden of supporting a very large family precluding them from doing more. Often he would walk to Manchester and back in the evenings to buy two or three shillings' worth of paint and canvas, returning almost at midnight, after his eighteen miles' walk, sometimes wet through and completely exhausted, but borne up throughout by his inexhaustible hope and invincible determination. The further progress of the self-taught artist is best narrated in his own words:—

“The next pictures I painted,” he writes, “were a Landscape by Moonlight, a Fruitpiece, and one or two others; after which I conceived the idea of painting ‘The Forge.’ I had for some time thought about it, but had not attempted to embody the conception in a drawing. I now, however, made a sketch of the subject upon paper, and then proceeded to paint it on canvas. The picture simply represents the interior of a large workshop such as I have been accustomed to work in, although not of any particular shop. It is, therefore, to this extent, an original conception. Having made an outline of the subject, I found that, before I could proceed with it successfully, a knowledge of anatomy was indispensable to enable me accurately to delineate the muscles of the figures. My brother Peter came to my assistance at this juncture, and kindly purchased for me Flaxman’s ‘Anatomical Studies’—a work altogether beyond my means at the time, for it cost twenty-four shillings. This book I looked upon as a great treasure, and I studied it laboriously, rising at three o’clock in the morning to draw after it, and occasionally getting my brother Peter to stand for me as a model at that untimely hour. Although I gradually improved myself by this practice, it was some time before I felt sufficient confidence to go on with my picture. I also felt hampered by my want of knowledge of perspective, which I endeavoured to remedy by carefully studying Brook Taylor’s ‘Principles;’ and shortly after I resumed my painting. While engaged in the study of perspective at home, I used to apply for and

obtain leave to work at the heavier kinds of smith work at the foundry, and for this reason—the time required for heating the heaviest iron work is so much longer than that required for heating the lighter, that it enabled me to secure a number of spare minutes in the course of the day, which I carefully employed in making diagrams in perspective upon the sheet iron casing in front of the hearth at which I worked."

Thus assiduously working and studying, James Sharples steadily advanced in his knowledge of the principles of art, and acquired greater facility in its practice. Some eighteen months after the expiry of his apprenticeship he painted a portrait of his father, which attracted considerable notice in the town; as also did the picture of "The Forge," which was finished soon after. His success in portrait-painting even obtained for him a commission from the foreman of the shop to paint a family group, and Sharples executed it so well that the foreman not only paid him the agreed price of eighteen pounds, but thirty shillings to boot. While engaged upon this group he ceased to work at the foundry, and he had thoughts of giving up his trade altogether and devoting himself exclusively to painting. He proceeded to paint several pictures, amongst others a head of Christ, an original conception, life-size, and a view of Bury; but not obtaining sufficient employment at portraits to occupy his time, or give him the prospect of a steady income, he had the good sense to resume his leather apron, and go on working at his honest trade of a blacksmith; employing his leisure hours in engraving his picture of "The Forge," since published. He was induced to commence the engraving by the following circumstance. A Manchester picture-dealer, to whom he showed the painting, let drop the observation, that in the hands of a skilful engraver it would make a very good print. Sharples immediately conceived the idea of engraving it himself, though altogether ignorant of the art. The difficulties which he encountered and successfully overcame in carrying out his project are thus described by himself:—

“I had seen an advertisement of a Sheffield steel-plate maker, giving a list of the prices at which he supplied plates of various sizes, and, fixing upon one of suitable dimensions, I remitted the amount, together with a small additional sum for which I requested him to send me a few engraving tools. I could not specify the articles wanted, for I did not then know anything about the process of engraving. However, there duly arrived with the plate three or four gravers and an etching needle; the latter I spoiled before I knew its use. Whilst working at the plate, the Amalgamated Society of Engineers offered a premium for the best design for an emblematical picture, for which I determined to compete, and I was so fortunate as to win the prize. Shortly after this I removed to Blackburn, where I obtained employment at Messrs. Yates', engineers, as an engine-smith; and continued to employ my leisure time in drawing, painting, and engraving, as before. With the engraving I made but very slow progress, owing to the difficulties I experienced from not possessing proper tools. I then determined to try to make some that would suit my purpose, and after several failures I succeeded in making many that I have used in the course of my engraving. I was also greatly at a loss for want of a proper magnifying glass, and part of the plate was executed with no other assistance of this sort than what my father's spectacles afforded, though I afterwards succeeded in obtaining a proper magnifier, which was of the utmost use to me. An incident occurred while I was engraving the plate, which had almost caused me to abandon it altogether. It sometimes happened that I was obliged to lay it aside for a considerable time, when other work pressed; and in order to guard it against rust, I was accustomed to rub over the graven parts with oil. But on examining the plate after one of such intervals, I found that the oil had become a dark sticky substance extremely difficult to get out. I tried to pick it out with a needle, but found that it would almost take as much time as to engrave the parts afresh. I was in great despair at this, but at length hit upon the

expedient of boiling it in water containing soda, and afterwards rubbing the engraved parts with a tooth-brush; and to my delight found the plan succeeded perfectly. My greatest difficulties now over, patience and perseverance were all that were needed to bring my labours to a successful issue. I had neither advice nor assistance from any one in finishing the plate. If, therefore, the work possesses any merit, I can claim it as my own; and if in its accomplishment I have contributed to show what can be done by persevering industry and determination, it is all the honour I wish to lay claim to."

It would be beside our purpose to enter upon any criticism of "The Forge" as an engraving; its merits having already been genially recognised by the 'Art Journal,' the 'Athenæum,' the 'Critic,' and other journals. The execution of the work occupied James Sharples's leisure evening hours during a period of five years; and it was only when he took the plate to the printer that he for the first time saw an engraved plate produced by any other man. To this unvarnished picture of industry and genius, we add one other trait, and it is a domestic one. "I have been married seven years," says he, "and during that time my greatest pleasure, after I have finished my daily labour at the foundry, has been to resume my pencil or graver, frequently until a late hour of the evening, my wife meanwhile sitting by my side and reading to me from some interesting book,"—a simple but beautiful testimony to the thorough common sense as well as the genuine right-heartedness of this most interesting and deserving workman.

The same industry and application which we have found to be necessary in order to acquire excellence in painting and sculpture, are equally required in the sister art of music—the one being the poetry of form and colour, the other of the sounds of nature. Handel was an indefatigable and constant worker; he was never cast down by defeat, but his energy seemed to increase the more that adversity

struck him. When a prey to his mortifications as an insolvent debtor, he did not give way for a moment, but in one year produced his 'Saul,' 'Israel,' the music for Dryden's 'Ode,' his 'Twelve Grand Concertos,' and the opera of 'Jupiter in Argos,' among the finest of his works. As his biographer says of him, "He braved everything, and, by his unaided self, accomplished the work of twelve men."

Haydn, speaking of his art, said, "It consists in taking up a subject and pursuing it." "Work," said Mozart, "is my chief pleasure." Beethoven's favourite maxim was "The barriers are not erected which can say to aspiring talents and industry, 'Thus far and no farther.'" When Moscheles submitted his score of 'Fidelio' for the pianoforte to Beethoven, the latter found written at the bottom of the last page, "Finis, with God's help." Beethoven immediately wrote underneath, "O man! help thyself!" This was the motto of his artistic life. John Sebastian Bach said of himself, "I was industrious; whoever is equally sedulous, will be equally successful." But there is no doubt that Bach was born with a passion for music, which formed the mainspring of his industry, and was the true secret of his success. When a mere youth, his elder brother, wishing to turn his abilities into another direction, destroyed a collection of studies which the young Sebastian, being denied candles, had copied by moonlight; proving the strong natural bent of the boy's genius. Of Meyerbeer, Bayle thus wrote from Milan in 1820:—"He is a man of some talent, but no genius; he lives solitary, working fifteen hours a day at music." Years passed, and Meyerbeer's hard work fully brought out his genius, as displayed in his 'Roberto,' 'Huguenots,' 'Prophete,' and other works, confessedly amongst the greatest operas which have been produced in modern times.

Although musical composition is not an art in which Englishmen have as yet greatly distinguished themselves, their energies having for the most part taken other and

more practical directions, we are not without native illustrations of the power of perseverance in this special pursuit. Arne was an upholsterer's son, intended by his father for the legal profession ; but his love of music was so great, that he could not be withheld from pursuing it. While engaged in an attorney's office, his means were very limited, but, to gratify his tastes, he was accustomed to borrow a livery and go into the gallery of the Opera, then appropriated to domestics. Unknown to his father he made great progress with the violin, and the first knowledge his father had of the circumstance was when accidentally calling at the house of a neighbouring gentleman, to his surprise and consternation he found his son playing the leading instrument with a party of musicians. This incident decided the fate of Arne. His father offered no further opposition to his wishes ; and the world thereby lost a lawyer, but gained a musician of much taste and delicacy of feeling, who added many valuable works to our stores of English music.

The career of William Jackson, the author of 'The Deliverance of Israel,' an oratorio which has been successfully performed in the principal musical towns of his native county of York, furnishes an interesting illustration of the triumph of perseverance over difficulties in the pursuit of musical science. He is the son of a miller at Masham, a little town situated in the valley of the Yore, in the north-west corner of Yorkshire. Musical taste seems to have been hereditary in the family, for his father played the fife in the band of the Masham Volunteers, and was a singer in the parish choir. His grandfather also was leading singer and ringer at Masham Church ; and one of the boy's earliest musical treats was to be present at the bell-pealing on Sunday mornings. During the service, his wonder was still more excited by the organist's performance on the barrel-organ, the doors of which were thrown open behind to let the sound fully into the church, by which the stops, pipes, barrels, staples, keyboard, and jacks, were fully

exposed, to the wonderment of the little boys sitting in the gallery behind, and to none more than our young musician. At eight years of age he began to play upon his father's old fife, which, however, would not sound D; but his mother remedied the difficulty by buying for him a one-keyed flute; and shortly after, a gentleman of the neighbourhood presented him with a flute with four silver keys. As the boy made no progress with his "book learning," being fonder of cricket, fives, and boxing, than of his school lessons—the village schoolmaster giving him up as "a bad job"—his parents sent him off to a school at Pateley Bridge. While there he found congenial society in a club of village choral singers at Brighthouse Gate, and with them he learnt the sol-fa-ing gamut on the old English plan. He was thus well drilled in the reading of music, in which he soon became a proficient. His progress astonished the club, and he returned home full of musical ambition. He now learnt to play upon his father's old piano, but with little melodious result; and he became eager to possess a finger-organ, but had no means of procuring one. About this time, a neighbouring parish clerk had purchased, for an insignificant sum, a small disabled barrel-organ, which had gone the circuit of the northern counties with a show. The clerk tried to revive the tones of the instrument, but failed; at last he bethought him that he would try the skill of young Jackson, who had succeeded in making some alterations and improvements in the hand-organ of the parish church. He accordingly brought it to the lad's house in a donkey cart, and in a short time the instrument was repaired, and played over its old tunes again, greatly to the owner's satisfaction.

The thought now haunted the youth that he could make a barrel-organ, and he determined to do so. His father and he set to work, and though without practice in carpentering, yet, by dint of hard labour and after many failures, they at last succeeded; and an organ was constructed which played ten tunes very decently, and the instrument was

generally regarded as a marvel in the neighbourhood. Young Jackson was now frequently sent for to repair old church organs, and to put new music upon the barrels which he added to them. All this he accomplished to the satisfaction of his employers, after which he proceeded with the construction of a four-stop finger-organ, adapting to it the keys of an old harpsichord. This he learnt to play upon,—studying ‘Callcott’s Thorough Bass’ in the evening, and working at his trade of a miller during the day; occasionally also tramping about the country as a “cadger,” with an ass and a cart. During summer he worked in the fields, at turnip-time, hay-time, and harvest, but was never without the solace of music in his leisure evening hours. He next tried his hand at musical composition, and a dozen of his anthems were shown to the late Mr. Camidge, of York, as “the production of a miller’s lad of fourteen.” Mr. Camidge was pleased with them, marked the objectionable passages, and returned them with the encouraging remark, that they did the youth great credit, and that he must “go on writing.”

A village band having been set on foot at Masham, young Jackson joined it, and was ultimately appointed leader. He played all the instruments by turns, and thus acquired a considerable practical knowledge of his art: he also composed numerous tunes for the band. A new finger-organ having been presented to the parish church, he was further appointed organist. He now gave up his employment as a journeyman miller, and commenced tallow-chandling, still employing his spare hours in the study of music. In 1839 he published his first anthem—‘For joy let fertile valleys sing;’ and in the following year he gained the first prize from the Huddersfield Glee Club, for his ‘Sisters of the Lea.’ His other anthem, ‘God be merciful to us,’ and the 103rd Psalm, written for a double chorus and orchestra, are well known. In the midst of these minor works, Jackson proceeded with the composition of his oratorio,—‘The Deliverance of Israel from Babylon.’ His practice was, to jot down a sketch of the ideas as they presented themselves

to his mind, and to write them out in score in the evenings, after he had left his work in the candle-shop. His oratorio was published in parts, in the course of 1844-5, and he published the last chorus on his twenty-ninth birthday. The work was exceedingly well received by musical critics, and has been frequently performed with great success in the northern towns. Mr. Jackson is now settled at Bradford, and not long since had the honour of leading his fine company of Bradford choral singers before Her Majesty at Buckingham Palace; on which occasion, as well as at the Crystal Palace, some fine choral pieces of his composition, from his MS. work (since published), entitled 'The Year,' were performed with great effect.

Such is a very brief outline of the career of a self-taught English musician, who promises, in the maturity of his powers, to take high rank among native composers. His life affords but another illustration of the power of self-help, and the force of courage and industry, in enabling a man to surmount and overcome early difficulties and obstructions of no ordinary kind.

CHAPTER VI.

INDUSTRY AND THE ENGLISH PEERAGE.

“Active doer noble liver,
Strong to labour, sure to conquer.”—*Browning*.

PRACTICAL industry, wisely and vigorously applied, never fails of success. It carries a man onward and upward, brings out his individual character, and powerfully stimulates the action of others. All may not rise equally, yet each, on the whole, very much according to his deserts. “Though all cannot live on the piazza,” as the Tuscan proverb has it, “every one may feel the sun.”

We have already referred to some illustrious Commoners raised from humble to elevated positions by the power of application and industry; and we might point to even the Peerage itself as affording equally instructive examples. One reason why the peerage of England has succeeded so well in retaining its vigour and elasticity, arises from the fact that, unlike the peerages of other countries, it has been fed from time to time by the best industrial blood of the country—the very “liver, heart, and brain of Britain.” Like the fabled Antæus, it has been invigorated and refreshed by frequently touching its mother earth, and mingling freely with that most ancient order of nobility—the working order; as Lord Chesterfield inferentially admitted it to be when he placed as the first of his pedigree, “ADAM *de Stanhope*—EVE *de Stanhope*.”

The blood of all men doubtless flows from equally remote sources; and the proximate roots of most families in this

country, not many centuries ago, closely intermingled in the common Teutonic stock from which we derive our origin. The grand pervading features of the race—industry, energy, and the spirit of independence—have ever remained the same. To this day the adventurous daring of the Vikings crops out from time to time in our common soldiers and sailors, as in the aristocratic officers who lead them; and the same noble spirit looks out from under the peasant's garb as well as the peer's ermine.

Besides, there has been a constant rising and falling in society going on—new families taking the place of the old, which have subsided in many cases into the ranks of the common people. The civil wars and rebellions ruined the old nobility, and dispersed their families, but did not destroy them. They became farmers, mechanics, and labourers—mingling again with the great industrial race from which they had originally sprung. Thus, not many years since, the claimant of the earldom of Perth was discovered in the person of a labourer in a Northumberland coal-pit; and at this day, it is understood that the lineal representative of Simon de Montfort, England's premier baron, is a saddler in Tooley Street. Hugh Miller, when working as a stonemason near Edinburgh, was served by a hodman, who was one of the numerous claimants for the earldom of Crauford—all that was wanted to establish his claim being a missing marriage certificate; and while the work was going on, the cry resounded from the walls many times in the day, of—“John, Yearl Crauford, bring us anither hod o' lime.”

The great bulk of our peerage is comparatively modern, so far as the titles go; but it is not the less noble that it has been recruited to so large an extent from the ranks of honourable industry. In olden times, the wealth and commerce of London, conducted as it was by energetic and enterprising men, was a prolific source of peerages. Thus, the earldom of Cornwallis was founded by Thomas Cornwallis, the Cheapside merchant; that of Essex by William Capel, the draper; and that of Craven by William Craven,

the merchant tailor. The modern Earl of Warwick is not descended from "the Kingmaker," but from William Greville, the woolstapler; whilst the modern dukes of Northumberland find their head, not in the Percies, but in Hugh Smithson, a respectable London apothecary. The founders of the families of Dartmouth, Radnor, Ducie, and Pomfret, were respectively a skinner, a silk manufacturer, a merchant tailor, and a Calais merchant: whilst the founders of the peerages of Tankerville, Dormer, and Coventry, were mercers. The ancestors of Earl Romney, and Lord Dudley and Ward, were goldsmiths and jewellers; and Lord Dacres was a banker in the reign of Charles I., as Lord Overstone is in that of Queen Victoria. Edward Osborne, the founder of the Dukedom of Leeds, was apprentice to William Hewet, a rich clothworker on London Bridge, whose only daughter he courageously rescued from drowning, by leaping into the Thames after her, and eventually married. Among other peerages founded by trade, are those of Fitzwilliam, Leigh, Petre, Cowper, Darnley, Hill, and Carrington. The founders of the houses of Foley and Normanby were remarkable men in many respects, and, as furnishing striking examples of energy of character, the story of their lives is especially worthy of preservation.

The father of Richard Foley, the founder of the family, was a small yeoman living in the neighbourhood of Stourbridge in the time of Charles I. That place was then the centre of the iron manufacture of the midland districts, and Richard was brought up to work at one of the branches of the trade—that of nail-making. He was thus a daily observer of the great labour and loss of time caused by the clumsy process then adopted for dividing the rods of iron in the manufacture of nails. It appeared that the Stourbridge nailers were gradually losing their trade, in consequence of the importation of nails from Sweden, by which they were very much undersold in the market. It became known that the Swedes were enabled to make their nails so much cheaper, by the use of splitting mills and machinery, which

had completely superseded the laborious process of preparing the rods for nail-making still in use in England.

Richard Foley, having ascertained this much, determined to make himself master of the new process. He suddenly disappeared from the neighbourhood of Stourbridge, and was not heard of for several years. No one knew where he had gone; not even his own family; for he had not informed them of his intention, lest he should fail. He had little or no money in his pocket, but contrived to get to Hull, where he engaged himself on board a ship bound for a Swedish port, and worked his passage there. The only article of property which he possessed was his fiddle, and on landing in Sweden he begged and fiddled his way to the Dannemora mines, near Upsala. He was a capital musician, as well as a pleasant fellow, and soon ingratiated himself with the iron-workers. He was received into the works, to every part of which he had access; and he seized the opportunity thus afforded him of storing his mind with observations, and mastering, as he thought, the mechanism of iron-splitting. After a continued stay for this purpose, he suddenly disappeared from amongst his kind friends the miners—no one knew whither.

Arrived in England, he communicated the results of his voyage to Mr. Knight and another person at Stourbridge, who had sufficient confidence in him to advance the requisite funds for the purpose of erecting buildings and machinery for splitting iron by the new process. But when set to work, to the great vexation and disappointment of all, and especially of Richard Foley, it was found that the machinery would not act—at all events it would not split the bars of iron. Again Foley disappeared. It was thought that shame and mortification at his failure had driven him away for ever. Not so! Foley had determined to master this secret of iron-splitting, and he would yet do it. He had again set out for Sweden, accompanied by his fiddle as before, and found his way to the iron works, where he was joyfully welcomed by the miners; and, to make sure of

their fiddler, they this time lodged him in the very splitting-mill itself. There was such an apparent absence of intelligence about the man, except in fiddle-playing, that the miners entertained no suspicions as to the object of their minstrel, whom they thus enabled to attain the very end and aim of his life. He now carefully examined the works, and soon discovered the cause of his failure. He made drawings or tracings of the machinery as well as he could, for this was a branch of art quite new to him; and after remaining at the place long enough to enable him to verify his observations, and to impress the mechanical arrangements clearly and vividly on his mind, he again left the miners, reached a Swedish port, and took ship for England. A man of such purpose could not but succeed. Arrived amongst his surprised friends, he now completed his arrangements, and the results were entirely successful. By his skill and his industry he soon laid the foundations of an immense fortune, at the same time that he restored the business of an extensive district. He himself continued, during his life, to superintend his trade, aiding and encouraging all works of benevolence in his neighbourhood. He founded and endowed a school at Stourbridge; and his son Thomas (a great benefactor of Kidderminster), who was High Sheriff of Worcestershire in the time of "The Rump," founded and endowed an hospital, still in existence, for the free education of children at Old Swinford. All the early Foleys were Puritans. Richard Baxter seems to have been on familiar and intimate terms with various members of the family, and makes frequent mention of them in his 'Life and Times.' Thomas Foley, when appointed high sheriff of the county, requested Baxter to preach the customary sermon before him; and Baxter in his 'Life' speaks of him as "of so just and blameless dealing, that all men he ever had to do with magnified his great integrity and honesty, which were questioned by none." The family was worthily ennobled in the reign of Charles the Second.

William Phipps, the founder of the Mulgrave or Nor-

manby family, was a man quite as remarkable in his way as Richard Foley. His father was a gunsmith—a robust Englishman settled at Woolwich, in Maine, then forming part of our English colonies in America. He was born in 1651, one of a family of not fewer than twenty-six children (of whom twenty-one were sons), whose only fortune lay in their stout hearts and strong arms. William seems to have had a strong dash of the Danish sea-blood in his veins, and did not take kindly to the quiet life of a shepherd in which he spent his early years. By nature bold and adventurous, he longed to become a sailor and roam through the world. He sought to join some ship; but not being able to find one, he apprenticed himself to a shipbuilder, with whom he thoroughly learnt his trade, acquiring the arts of reading and writing during his leisure hours. Having completed his apprenticeship and removed to Boston, he wooed and married a widow of some means, after which he set up a little shipbuilding yard of his own, built a ship, and, putting to sea in her, he engaged in the lumber trade, which he carried on in a plodding and laborious way for the space of about ten years.

It happened that one day, whilst passing through the crooked streets of old Boston, he overheard some sailors talking to each other of a wreck which had just taken place off the Bahamas; that of a Spanish ship, supposed to have much money on board. His adventurous spirit was at once kindled, and getting together a likely crew without loss of time, he set sail for the Bahamas. The wreck being well in-shore, he easily found it, and succeeded in recovering a great deal of its cargo, but very little money; and the result was, that he barely defrayed his expenses. His success had been such, however, as to stimulate his enterprising spirit; and when he was told of another and far more richly laden vessel which had been wrecked near Port de la Plata more than half a century before, he forthwith formed the resolution of raising the wreck, or at all events fishing up the treasure.

Being too poor, however, to undertake such an enterprise without powerful help, he set sail for England in the hope that he might there obtain it. The fame of his success in raising the wreck off the Bahamas had already preceded him. He applied direct to the Government; and by his urgent enthusiasm, he succeeded in overcoming the usual inertia of official minds; and Charles II. eventually placed at his disposal the "Rose Algier," a ship of eighteen guns and ninety-five men, appointing him to the chief command.

Phipps then set sail to find the Spanish ship and fish up the treasure. He reached the coast of Hispaniola in safety; but how to find the sunken ship was the great difficulty. The fact of the wreck was more than fifty years old; and Phipps had only the traditionary rumours of the event to work upon. There was a wide coast to explore, and an outspread ocean, without any trace whatever of the wrecked argosy beneath it. But the man was stout in heart, and full of hope. He set his seamen to work to drag the coast, and for weeks they went on fishing up sea-weed, shingle, and bits of rock. No occupation could be more trying to seamen, and they began to grumble together, and to whisper that the man in command had brought them on a fool's errand.

At length the murmurs spoke aloud, and the men broke into open mutiny. A body of them rushed one day on to the quarter-deck, and demanded that the voyage should be relinquished. Phipps, however, was not a man to be intimidated; he seized the ringleaders, and sent the others back to their duty. It became necessary to bring the ship to anchor close to a small island for the purpose of repairs; and, to lighten her, the chief part of the stores were landed. Discontent still increasing amongst the crew, a new plot was laid amongst the men on shore to seize the ship, throw Phipps overboard, and start on a piratical cruize against the Spaniards in the South Seas. But it was necessary to secure the services of the chief ship carpenter,

who was consequently made privy to the plot. The man proved faithful, and seized an opportunity of telling Phipps of his danger. Summoning about him the men he knew to be loyal, he had the ship's guns loaded which commanded the shore, and the bridge communicating with the vessel drawn up. When the mutineers made their appearance, Phipps hailed them, and told them he would fire upon them if they approached the stores (still on land), and they drew back; on which, Phipps had the stores reshipped under cover of his guns. The mutineers, fearful of being left on a barren island, threw down their arms and implored to be permitted to return to their duty. The request was granted, and suitable precautions were taken against future mischief. Phipps took the first opportunity of landing the mutinous part of his crew, and engaging other men in their place; but, by the time that he could again proceed actively with his explorations, he found it absolutely necessary to proceed to England for the purpose of repairing his ship. He had now, however, gained more precise information as to the spot where the Spanish treasure ship had sunk; and, though as yet baffled, he was more confident than ever in the eventual success of his enterprise.

Returned to London, Phipps reported the result of his voyage to the Admiralty, who professed to be pleased with his exertions; but he had been unsuccessful, and they would not entrust him with another king's ship. James II. was now on the throne, and the Government was in trouble; so Phipps and his golden project appealed to them in vain. He next tried to raise the requisite means by a public subscription. At first he was laughed at; but his ceaseless importunity at length prevailed, and after four years' dinning of his project into the ears of the great—during which time he lived in great poverty—he at length succeeded. A company was formed, in twenty shares, the Duke of Albemarle, son of General Monk, taking the chief

interest in it, and subscribing the principal part of the necessary funds for the enterprise.

Like Foley, Phipps proved more fortunate in his second voyage than in his first. The ship arrived without accident at Port de la Plata, in the neighbourhood of the reef of rocks supposed to have been the scene of the wreck. His first object was to build a stout boat capable of carrying eight or ten oars, in constructing which Phipps used the adze himself. It is also said that he constructed a machine for the purpose of exploring the bottom of the sea similar to what is now known as the Diving Bell. Such a machine was found referred to in books, but Phipps knew little of books, and may be said to have re-invented the apparatus for his own use. He also engaged Indian divers, whose feats of diving for pearls, and in submarine operations, were very remarkable. The tender and boat having been taken to the reef, the men were set to work, the diving bell was sunk, and the various modes of dragging the bottom of the sea were employed continuously for many weeks, but without any prospect of success. Phipps, however, held on valiantly, hoping almost against hope. At length, one day, a sailor, looking over the boat's side down into the clear water, observed a curious sea-plant growing in what appeared to be a crevice of the rock; and he called upon an Indian diver to go down and fetch it for him. On the red man coming up with the weed, he reported that a number of ship's guns were lying in the same place. The intelligence was at first received with incredulity, but on further investigation it proved to be correct. Search was made, and presently a diver came up with a solid bar of silver in his arms. When Phipps was shown it, he exclaimed, "Thanks be to God! we are all made men." Diving bell and divers now went to work with a will, and in a few days, treasure was brought up to the value of about £300,000, with which Phipps set sail for England. On his arrival, it was urged upon the king that he should seize the ship and its cargo, under the pre-

tence that Phipps, when soliciting his Majesty's permission, had not given accurate information respecting the business. But the king replied, that he knew Phipps to be an honest man, and that he and his friends should divide the whole treasure amongst them, even though he had returned with double the value. Phipps's share was about £20,000, and the king, to show his approval of his energy and honesty in conducting the enterprise, conferred upon him the honour of knighthood. He was also made High Sheriff of New England; and during the time he held the office, he did valiant service for the mother country and the colonists against the French, by expeditions against Port Royal and Quebec. He also held the post of Governor of Massachusetts; from which he returned to England, and died in London in 1695.

Phipps throughout the later part of his career, was not ashamed to allude to the lowness of his origin, and it was matter of honest pride to him that he had risen from the condition of a common ship carpenter to the honours of knighthood and the government of a province. When perplexed with public business, he would often declare that it would be easier for him to go back to his broad axe again. He left behind him a character for probity, honesty, patriotism, and courage, which is certainly not the least noble inheritance of the house of Normanby.

William Petty, the founder of the house of Lansdowne, was a man of like energy and public usefulness in his day. He was the son of a clothier in humble circumstances, at Romsey, in Hampshire, and was born in 1623. In his boyhood he obtained a tolerable education at the grammar school of his native town; after which he determined to improve himself by study at the University of Caen, in Normandy. Whilst there he contrived to support himself, unassisted by his father, carrying on a sort of small pedler's trade with "a little stock of merchandize." Returning to England, he had himself bound apprentice to a sea captain, who "drubbed him with a rope's end" for the badness of his sight. He left the navy

in disgust, taking to the study of medicine. When at Paris he engaged in dissection, during which time he also drew diagrams for Hobbes, who was then writing his treatise on Optics. He was reduced to such poverty that he subsisted for two or three weeks entirely on walnuts. But again he began to trade in a small way, turning an honest penny, and he was enabled shortly to return to England with money in his pocket. Being of an ingenious mechanical turn, we find him taking out a patent for a letter-copying machine. He began to write upon the arts and sciences, and practised chemistry and physic with such success that his reputation shortly became considerable. Associating with men of science, the project of forming a Society for its prosecution was discussed, and the first meetings of the infant Royal Society were held at his lodgings. At Oxford he acted for a time as deputy to the anatomical professor there, who had a great repugnance to dissection. In 1652 his industry was rewarded by the appointment of physician to the army in Ireland, whither he went; and whilst there he was the medical attendant of three successive lords-lieutenant, Lambert, Fleetwood, and Henry Cromwell. Large grants of forfeited land having been awarded to the Puritan soldiery, Petty observed that the lands were very inaccurately measured; and in the midst of his many avocations he undertook to do the work himself. His appointments became so numerous and lucrative that he was charged by the envious with corruption, and removed from them all; but was again taken into favour at the Restoration.

Petty was a most indefatigable contriver, inventor, and organizer of industry. One of his inventions was a double-bottomed ship, to sail against wind and tide. He published treatises on dyeing, on naval philosophy, on woollen cloth manufacture, on political arithmetic, and many other subjects. He founded iron works, opened lead mines, and commenced a pilchard fishery and a timber trade; in the midst of which he found time to take part in the discussions of the Royal Society, to which he largely contributed. He

left an ample fortune to his sons, the eldest of whom was created Baron Shelburne. His will was a curious document, singularly illustrative of his character; containing a detail of the principal events of his life, and the gradual advancement of his fortune. His sentiments on pauperism are characteristic: "As for legacies for the poor," said he, "I am at a stand; as for beggars by trade and election, I give them nothing; as for impotents by the hand of God, the public ought to maintain them; as for those who have been bred to no calling nor estate, they should be put upon their kindred;" . . . "wherefore I am contented that I have assisted all my poor relations, and put many into a way of getting their own bread; have laboured in public works; and by inventions have sought out real objects of charity; and I do hereby conjure all who partake of my estate, from time to time, to do the same at their peril. Nevertheless, to answer custom, and to take the surer side, I give 20*l.* to the most wanting of the parish wherein I die." He was interred in the fine old Norman church of Romsey—the town where he was born a poor man's son—and on the south side of the choir is still to be seen a plain slab, with the inscription, cut by an illiterate workman, "Here Layes Sir William Petty."

Another family, ennobled by invention and trade, in our own day, is that of Strutt, of Belper. Their patent of nobility was virtually secured by Jedediah Strutt in 1758, when he invented his machine for making ribbed stockings, and thereby laid the foundations of a fortune which the subsequent bearers of the name have largely increased and nobly employed. The father of Jedediah was a farmer and maltster, who did very little for the education of his children; yet they all prospered. Jedediah was the second son, and while occupied as a farmer at Blackwell, near Normanton, he learnt from his wife's brother, who was a hosier, and well acquainted with the stocking-frame, that some unsuccessful attempts had been made to manufacture ribbed stockings upon it. Being naturally ingenious, and self-

trained in mechanics, he was induced to investigate the operations of the stocking-frame; and after the sacrifice of considerable time, labour, and means, he at length succeeded in perfecting his invention. A manufactory of ribbed stockings was then started by him at Derby, in conjunction with his brother, and proved eminently successful. He afterwards joined Arkwright,—being quick to detect the value of his invention for cotton spinning,—found the means for securing his patent, and established extensive cotton mills at Cromford, in Derbyshire. Mr. Edward Strutt was of like inventive genius to his father, and he is said to have invented a self-acting mule, the success of which was only prevented by the mechanical skill of that day not being equal to its manufacture. After the lapse of the partnership with Arkwright, the Strutts erected their cotton mills at Milford, near Belper, which worthily gives its title to the present head of the family.

No less industry and energy have been displayed by the many brave men, both in present and past times, who have earned the peerage by their valour on land and at sea. Not to mention the older feudal lords, whose tenure depended upon military service, and who so often led the van of the English armies in great national encounters, we may point to Nelson, St. Vincent, and Lyons—to Wellington, Hill, Hardinge, Clyde, and many more in recent times, who have nobly earned their rank by their distinguished services. But plodding industry has far oftener worked its way to the peerage by the honourable pursuit of the legal profession, than by any other. No fewer than seventy British peerages, including two dukedoms, have been founded by successful lawyers. Mansfield and Erskine were, it is true, of noble families; but the latter used to thank God, that out of his own family he did not know a lord.* The others were,

* Mansfield owed nothing to his noble relations, who were poor and influential. His success was the legitimate and logical result of the means which he sedulously employed to secure it. When a boy he rode up from Scotland to London on a pony—taking two months to make the journey. After a course

for the most part, the sons of attorneys, grocers, clergymen, merchants, and hardworking members of the middle class. Out of this profession have sprung the peerages of Howard and Cavendish, the first peers of both families having been judges; those of Aylesford, Ellenborough, Guildford, Shaftesbury, Hardwicke, Cardigan, Clarendon, Camden, Ellesmere, Rosslyn; and others nearer our own day, such as Tenterden, Eldon, Brougham, Denman, Truro, Lyndhurst, St. Leonards, Cranworth, Campbell, and Chelmsford.

The eminent Lord Lyndhurst's father was a portrait painter, and that of St. Leonards a hairdresser in Burlington Street. Young Edward Sugden was originally an errand-boy in the office of the late Mr. Groom, of Henrietta Street, Cavendish Square, a certificated conveyancer; and it was there that the future Lord Chancellor of Ireland obtained his first notions of law. The origin of the late Lord Tenterden was perhaps the humblest of all, nor was he ashamed of it; for he felt that the industry, study, and application, by means of which he achieved his eminent position, were entirely due to himself. It is related of him, that on one occasion he took his son Charles to a little shed then standing opposite the western front of Canterbury Cathedral, and pointing it out to him, said, "Charles, you see this little shop; I have brought you here on purpose to show it you. In that shop your grandfather used to shave for a penny! that is the proudest reflection of my life." When a boy, Lord Tenterden was a singer in the Cathedral, and it is a curious circumstance that his destination in life was changed by a disappointment. When he and Mr. Justice Richards were going the Home Circuit together, they went to service in the cathedral; and on Richards commending the voice of

of school and college, he entered upon the profession of the law, and he closed a career of patient and ceaseless labour as Lord Chief Justice of England—the functions of which he is universally admitted to have performed with unsurpassed ability, justice, and honour

a singing man in the choir, Lord Tenterden said, "Ah! that is the only man I ever envied! When at school in this town, we were candidates for a chorister's place, and he obtained it."

Not less remarkable was the rise to the same distinguished office of Lord Chief Justice, of the rugged Kenyon and the robust Ellenborough; nor was he a less notable man who recently held the same office—the astute Lord Campbell, late Lord Chancellor of England, son of a parish minister in Fifeshire. For many years he worked hard as a reporter for the press, while diligently preparing himself for the practice of his profession. It is said of him, that at the beginning of his career, he was accustomed to walk from county town to county town when on circuit, being as yet too poor to afford the luxury of posting. But step by step he rose slowly but surely to that eminence and distinction which ever follow a career of industry honourably and energetically pursued, in the legal, as in every other profession.

There have been equally illustrious instances of Lords Chancellors who have plodded up the steep of fame and honour with equal energy and success. The career of the late Lord Eldon is perhaps one of the most remarkable examples. He was the son of a Newcastle coal-fitter; a mischievous rather than a studious boy; a great scapegrace at school, and the subject of many terrible thrashings,—for orchard-robbing was one of the favourite exploits of the future Lord Chancellor. His father first thought of putting him apprentice to a grocer, and afterwards had almost made up his mind to bring him up to his own trade of a coal-fitter. But by this time his eldest son William (afterwards Lord Stowell) who had gained a scholarship at Oxford, wrote to his father, "Send Jack up to me, I can do better for him." John was sent up to Oxford accordingly, where, by his brother's influence and his own application, he succeeded in obtaining a fellowship. But when at home during the vacation, he was so unfortunate—or rather so fortunate

as the issue proved—as to fall in love; and running across the Border with his eloped bride, he married, and, as his friends thought, ruined himself for life. He had neither house nor home when he married, and had not yet earned a penny. He lost his fellowship, and at the same time shut himself out from preferment in the Church, for which he had been destined. He accordingly turned his attention to the study of the law. To a friend he wrote, “I have married rashly; but it is my determination to work hard to provide for the woman I love.”

John Scott came up to London, and took a small house in Cursitor Lane, where he settled down to the study of the law. He worked with great diligence and resolution; rising at four every morning and studying till late at night, binding a wet towel round his head to keep himself awake. Too poor to study under a special pleader, he copied out three folio volumes from a manuscript collection of precedents. Long after, when Lord Chancellor, passing down Cursitor Lane one day, he said to his secretary, “Here was my first perch: many a time do I recollect coming down this street with sixpence in my hand to buy sprats for supper.” When at length called to the bar, he waited long for employment. His first year’s earnings amounted to only nine shillings. For four years he assiduously attended the London Courts and the Northern Circuit, with little better success. Even in his native town, he seldom had other than pauper cases to defend. The results were indeed so discouraging, that he had almost determined to relinquish his chance of London business, and settle down in some provincial town as a country barrister. His brother William wrote home, “Business is dull with poor Jack, very dull indeed!” But as he had escaped being a grocer, a coal-fitter, and a country parson, so did he also escape being a country lawyer.

An opportunity at length occurred which enabled John Scott to exhibit the large legal knowledge which he had so

laboriously acquired. In a case in which he was employed, he urged a legal point against the wishes both of the attorney and client who employed him. The Master of the Rolls decided against him, but on an appeal to the House of Lords, Lord Thurlow reversed the decision on the very point that Scott had urged. On leaving the House that day, a solicitor tapped him on the shoulder and said, "Young man, your bread and butter's cut for life." And the prophecy proved a faithful one. Lord Mansfield used to say that he knew no interval between no business and 3000*l.* a-year, and Scott might have told the same story; for so rapid was his progress, that in 1783, when only thirty-two, he was appointed King's Counsel, was at the head of the Northern Circuit, and sat in Parliament for the borough of Weobley. It was in the dull but unflinching drudgery of the early part of his career that he laid the foundation of his future success. He won his spurs by perseverance, knowledge, and ability, diligently cultivated; he was successively appointed to the offices of solicitor and attorney-general, and rose steadily upwards to the highest office that the Crown had to bestow—that of Lord Chancellor of England, which he held for a quarter of a century.

Henry Bickersteth was the son of a surgeon at Kirkby Lonsdale, in Westmoreland, and was himself educated to that profession. As a student at Edinburgh, he distinguished himself by the steadiness with which he worked, and the application which he devoted to the science of medicine. Returned to Kirkby Lonsdale, he took an active part in his father's practice; but he had no liking for the profession, and grew discontented with the obscurity of a country town. He went on, nevertheless, diligently improving himself, and engaged in speculations in the higher branches of physiology. In conformity with his own wish, his father consented to send him to Cambridge, where it was his ambition to take a medical degree with the view of practising in the metropolis. Close application to his studies

threw him out of health, however, and with a view to re-establishing his strength he accepted the appointment of travelling physician to Lord Oxford. While abroad he mastered Italian, and acquired a great admiration for Italian literature, but no greater liking for medicine than before. On the contrary, he determined to abandon it; but returning to Cambridge, he took his degree, and that he worked hard may be inferred from the fact that he was senior wrangler of his year. Disappointed in his desire to enter the army, he turned to the bar, and entered a student of the Inner Temple. He worked as hard at law as he had done at medicine. Writing to his father, he said, "Everybody says to me, 'You are certain of success in the end—only persevere;' and though I don't well understand how this is to happen, I try to believe it as much as I can, and I shall not fail to do everything in my power." At twenty-eight he was called to the bar, and had every step in life yet to make. His means were straitened, and he lived upon the contributions of his friends. For years he studied and waited. Still no business came. He stinted himself in recreation, in clothes, and even in the necessities of life; struggling on indefatigably through all. Writing home, he "confesses that he hardly knows how he shall be able to struggle on till he has had fair time and opportunity to establish himself." After three years waiting thus without success, he wrote to his friends that rather than be a burden upon them longer, he is willing to give the matter up and return to Cambridge, "where he is sure of support and some profit." The friends at home sent him another small remittance, and he went on. Business gradually came in. Acquitting himself creditably in small matters, he was entrusted with cases of greater importance. He was a man who never missed an opportunity, nor allowed a legitimate chance of improvement to escape him. His unflinching industry soon began to tell upon his fortunes; a few more years and he was not only enabled to do without assistance from home, but he was in a position to

pay back with interest the debts which he had incurred. The clouds had dispersed, and the after-career of Henry Bickersteth was one of honour, of emolument, and of distinguished fame. He ended his career as Master of the Rolls, sitting in the House of Peers as Baron Langdale. His life affords only another illustration of the power of patience, perseverance, and conscientious working, in elevating the character of the individual, and crowning his labours with the most complete success.

Such are a few of the distinguished men who have honourably worked their way to the highest position, and won the richest rewards of their profession, by the exercise of honest industry and patient perseverance.

CHAPTER VII.

ENERGY AND COURAGE.

“Den muthigen gehort die Welt.”—*German Proverb.*

“In every work that he began . . . he did it with all his heart, and prospered.”—*II. Chron. xxxi. 21.*

THERE is a famous speech recorded of an old Norseman, thoroughly characteristic of the Teuton. “I believe neither in idols nor demons,” said he, “I put my sole trust in my own strength of body and soul.” The ancient crest of a pickaxe with the motto of “Either I will find a way or make one,” was an expression of the same sturdy independence and practical materialism, which to this day distinguishes the descendants of the Northmen. Indeed nothing could be more characteristic of the Scandinavian mythology, than that it had a god with a hammer. A man’s character is seen in small matters; and from even so slight a test as the mode in which a man wields a hammer, his energy may in some measure be inferred. Thus an eminent Frenchman hit off in a single phrase the characteristic quality of the inhabitants of a particular district, in which a friend of his proposed to settle and buy land. “Beware,” said he, “of making a purchase there; I know the men of that department; the pupils who come from it to our veterinary school at Paris, *do not strike hard upon the anvil*; they want energy; and you will not get a satisfactory return on any capital you may invest there.” A fine and just appreciation of character, indicating the accurate and thoughtful observer; and strikingly illustrative of the fact that it is the energy of the individual men that gives strength to a State, and con-

fers a value even upon the very soil which they cultivate. As the French proverb has it: "Tant vaut l'homme, tant vaut sa terre."

The cultivation of this quality is of the greatest importance; resolute determination in the pursuit of worthy objects being the foundation of all true greatness of character. Energy enables a man to force his way through irksome drudgery and dry details, and carries him onward and upward in every station in life. It accomplishes more than genius, with not one-half the disappointment and peril. It is not eminent talent that is required to ensure success in any pursuit, so much as purpose,—not merely the power to achieve, but the will to labour energetically and perseveringly. Hence energy of will may be defined to be the very central power of character in a man—in a word, it is the Man himself. It gives impulse to his every action, and soul to every effort. True hope is based on it,—and it is hope that gives the real perfume to life. There is a fine heraldic motto on a broken helmet in Battle Abbey, "L'espoir est ma force," which might be the motto of every man's life. "Woe unto him that is faint-hearted," says the son of Sirach. There is, indeed, no blessing equal to the possession of a stout heart. Even if a man fail in his efforts, it will be a great satisfaction to him to enjoy the consciousness of having done his best. In humble life nothing can be more cheering and beautiful than to see a man combating suffering by patience, triumphing in his integrity, and who, when his feet are bleeding and his limbs failing him, still walks upon his courage.

Mere wishes and desires but engender a sort of green sickness in young minds, unless they are promptly embodied in act and deed. It will not avail merely to wait, as so many do, "until Blucher comes up," but they must struggle on and persevere in the mean time, as Wellington did. The good purpose once formed must be carried out with alacrity, and without swerving. In many walks of life drudgery and toil must be cheerfully endured as the

necessary discipline of life. Hugh Miller says the only school in which he was properly taught was "that world-wide school in which toil and hardship are the severe but noble teachers." He who allows his application to falter, or shirks his work on frivolous pretexts, is on the sure road to ultimate failure. Let any task be undertaken as a thing not possible to be evaded, and it will soon come to be performed with alacrity and cheerfulness. Charles IX. of Sweden was a firm believer in the power of will, even in a youth. Laying his hand on the head of his youngest son when engaged upon a difficult task, he exclaimed, "He shall do it! he shall do it!" The habit of strenuous continued labour becomes comparatively easy in time, like every other habit. Thus even persons with the commonest brains and the most slender powers will accomplish much, if they apply themselves wholly and indefatigably to one thing at a time. Fowell Buxton placed his confidence in ordinary means and extraordinary application; realizing the scriptural injunction, "Whatsoever thy hand findeth to do, do it with all thy might;" and he himself attributed his own remarkable success in life to his practice of constantly "being a whole man to one thing at a time."

Nothing that is of real worth can be achieved without courageous working. Man owes his growth chiefly to that active striving of the will, that encounter with difficulty, which we call effort; and it is astonishing to find how often results apparently impracticable are thus made possible. An intense anticipation itself transforms possibility into reality; our desires being often but the precursors of the things which we are capable of performing. On the contrary, the timid and hesitating find everything impossible, chiefly because it seems so. It is related of a young French officer, that he used to walk about his apartment exclaiming, "*I will* be Marshal of France and a great general." This ardent desire was the presentiment of his success; for he did become a distinguished commander, and he died a Marshal of France.

Mr. Walker, author of the 'Original,' had so great a faith in the power of will, that he says on one occasion he *determined* to be well, and he was so. This may answer once; but, though safer to follow than many prescriptions, it will not always succeed. The power of mind over body is no doubt great, but it may be strained until the physical power breaks down altogether. It is related of Muley Moluc, the Moorish leader, that, when lying ill, almost worn out by an incurable disease, a battle took place between his troops and the Portuguese; when, starting from his litter at the great crisis of the fight, he rallied his army, led them to victory, and instantly afterwards sank exhausted and expired.

It is *will*,—force of purpose,—that enables a man to do or be whatever he sets his mind on being or doing. A holy man was accustomed to say, "Whatever you wish, that you are: for such is the force of our will, joined to the Divine, that whatever we wish to be, seriously, and with a true intention, that we become. No one ardently wishes to be submissive, patient, modest, or liberal, who does not become what he wishes." The story is told of a working carpenter, who was observed one day planing a magistrate's bench, which he was repairing, with more than usual carefulness; and when asked the reason, he replied, "Because I wish to make it easy against the time when I come to sit upon it myself." And singularly enough, the man actually lived to sit upon that very bench as a magistrate.

Whatever theoretical conclusions logicians may have formed as to the freedom of the will, each individual feels that practically he is free to choose between good and evil—that he is not like a mere straw thrown upon the water to mark the direction of the current, but that he has within him the power of a strong swimmer, and is capable of striking out for himself, of buffeting with the waves, and directing to a great extent his own independent course. There is no absolute constraint upon our volitions, and we feel and know that we are not bound, as by a spell, with reference to our actions. It would paralyze all desire of

excellence were we to think otherwise. The entire business and conduct of life, with its domestic rules, its social arrangements, and its public institutions, proceed upon the practical conviction that the will is free. Without this where would be responsibility?—and what the advantage of teaching, advising, preaching, reproof, and correction? What were the use of laws, were it not the universal belief, as it is the universal fact, that men obey them or not, very much as they individually determine? In every moment of our life, conscience is proclaiming that our will is free. It is the only thing that is wholly ours, and it rests solely with ourselves individually, whether we give it the right or the wrong direction. Our habits or our temptations are not our masters, but we of them. Even in yielding, conscience tells us we might resist; and that were we determined to master them, there would not be required for that purpose a stronger resolution than we know ourselves to be capable of exercising.

“You are now at the age,” said Lammenais once, addressing a gay youth, “at which a decision must be formed by you; a little later, and you may have to groan within the tomb which yourself have dug, without the power of rolling away the stone. That which the easiest becomes a habit in us is the will. Learn then to will strongly and decisively; thus fix your floating life, and leave it no longer to be carried hither and thither, like a withered leaf, by every wind that blows.”

Buxton held the conviction that a young man might be very much what he pleased, provided he formed a strong resolution and held to it. Writing to one of his own sons, he once said, “You are now at that period of life, in which you must make a turn to the right or the left. You must now give proofs of principle, determination, and strength of mind; or you must sink into idleness, and acquire the habits and character of a desultory, ineffective young man; and if once you fall to that point, you will find it no easy matter to rise again. I am sure that a young man may be

very much what he pleases. In my own case it was so. . . . Much of my happiness, and all my prosperity in life, have resulted from the change I made at your age. If you seriously resolve to be energetic and industrious, depend upon it that you will for your whole life have reason to rejoice that you were wise enough to form and to act upon that determination." As will, considered without regard to direction, is simply constancy, firmness, perseverance, it will be obvious that everything depends upon right direction and motives. Directed towards the enjoyment of the senses, the strong will may be a demon, and the intellect merely its debased slave; but directed towards good, the strong will is a king, and the intellect is then the minister of man's highest well-being.

"Where there is a will there is a way," is an old and true saying. He who resolves upon doing a thing, by that very resolution often scales the barriers to it, and secures its achievement. To think we are able, is almost to be so—to determine upon attainment is frequently attainment itself. Thus, earnest resolution has often seemed to have about it almost a savour of omnipotence. The strength of Suwarrow's character lay in his power of willing, and, like most resolute persons, he preached it up as a system. "You can only half will," he would say to people who failed. Like Richelieu and Napoleon, he would have the word "impossible" banished from the dictionary. "I don't know," "I can't," and "impossible," were words which he detested above all others. "Learn! Do! Try!" he would exclaim. His biographer has said of him, that he furnished a remarkable illustration of what may be effected by the energetic development and exercise of faculties, the germs of which at least are in every human heart.

One of Napoleon's favourite maxims was, "The truest wisdom is a resolute determination." His life, beyond most others, vividly showed what a powerful and unscrupulous will could accomplish. He threw his whole force of body and mind direct upon his work. Imbecile

rulers and the nations they governed went down before him in succession. He was told that the Alps stood in the way of his armies—"There shall be no Alps," he said, and the road across the Simplon was constructed, through a district formerly almost inaccessible. "Impossible," said he, "is a word only to be found in the dictionary of fools." He was a man who toiled terribly; sometimes employing and exhausting four secretaries at a time. He spared no one, not even himself. His influence inspired other men, and put a new life into them. "I made my generals out of mud," he said. But all was of no avail; for Napoleon's intense selfishness was his ruin, and the ruin of France, which he left a prey to anarchy. His life taught the lesson that power, however energetically wielded, without beneficence, is fatal to its possessor and its subjects; and that knowledge, or knowingness, without goodness, is but the incarnate principle of Evil.

Our own Wellington was a far greater man. Not less resolute, firm, and persistent, but much more self-denying, conscientious, and truly patriotic. Napoleon's aim was "Glory;" Wellington's watchword, like Nelson's, was "Duty." The former word, it is said, does not once occur in his despatches; the latter often, but never accompanied by any high-sounding professions. The greatest difficulties could neither embarrass nor intimidate Wellington; his energy invariably rising in proportion to the obstacles to be surmounted. The patience, the firmness, the resolution, with which he bore through the maddening vexations and gigantic difficulties of the Peninsular campaigns, is, perhaps, one of the sublimest things to be found in history. In Spain, Wellington not only exhibited the genius of the general, but the comprehensive wisdom of the statesman. Though his natural temper was irritable in the extreme, his high sense of duty enabled him to restrain it, and to those about him his patience seemed absolutely inexhaustible. His great character stands untarnished by ambition, by avarice, or any low passion. Though a man

of powerful individuality, he yet displayed a great variety of endowment. The equal of Napoleon in generalship, he was as prompt, vigorous, and daring as Clive; as wise a statesman as Cromwell; and as pure and high-minded as Washington. The great Wellington left behind him an enduring reputation, founded on toilsome campaigns won by skilful combination, by fortitude which nothing could exhaust, by sublime daring, and perhaps still sublimer patience.

Energy usually displays itself in promptitude and decision. When Ledyard, the traveller, was asked by the African Association when he would be ready to set out for Africa, he promptly answered, "To-morrow morning." Blucher's promptitude obtained for him the cognomen of "Marshal Forwards" throughout the Prussian army. When John Jervis, afterwards Earl St. Vincent, was asked when he would be ready to join his ship, he replied, "Directly." And when Sir Colin Campbell, appointed to the command of the Indian army, was asked when he could set out, his answer was, "To-morrow,"—an earnest of his subsequent success. For it is rapid decision, and a similar promptitude in action, such as taking instant advantage of an enemy's mistakes, that so often wins battles. "Every moment lost," said Napoleon, "gives an opportunity for misfortune;" and he used to say that he beat the Austrians because they never knew the value of time; while they dawdled, he overthrew them.

India has, during the last century, been a great field for the display of British energy. From Clive to Havelock and Clyde there is a long and honourable roll of distinguished names in Indian legislation and warfare,—such as Wellesley, Munro, Elphinstone, Bentinck, Metcalfe, Outram, Edwardes, and the Lawrences. Another great, but sullied name, is that of Warren Hastings—a man of dauntless will and indefatigable industry. His family was ancient and illustrious; but their vicissitudes of fortune, and ill-requited loyalty in the cause of the Stuarts, brought them to ruin, and the family estate at Daylesford, of which they

had been lords of the manor for hundreds of years, at length passed from their hands. The last Hastings of Daylesford had, however, previously presented the parish living to his second son; and it was in his house, many years later, that Warren Hastings, his grandson, was born. The boy learnt his letters at the village school of Daylesford, on the same bench with the children of the peasantry. He played in the fields which his fathers had owned; and what the loyal and brave Hastings of Daylesford *had* been, was ever in the boy's thoughts. His young ambition was fired, and it is said that, one summer's day, when only seven years old, as he laid him down on the bank of the stream which flows through the old domain, he formed in his mind the resolution that he would yet recover possession of the family lands. It was the romantic vision of a mere boy; yet he lived to realize it. The dream became a passion, rooted in his very life; and he pursued his determination through youth up to manhood, with that calm but indomitable force of will which was the most striking peculiarity of his character. The poor orphan boy became one of the most powerful men of his time; he retrieved the fortunes of his line; bought back the old estate, and rebuilt the family mansion. "When under a tropical sun," says Macaulay, "he ruled fifty millions of Asiatics, his hopes, amidst all the cares of war, finance, and legislation, still pointed to Daylesford. And when his long public life, so singularly chequered with good and evil, with glory and obloquy, had at length closed for ever, it was to Daylesford that he retired to die."

Sir Charles Napier was another Indian leader of extraordinary courage and determination. As he once said when surrounded with difficulties in one of his campaigns, "They only make my feet go deeper into the ground." His battle of Meeanee was one of the most extraordinary feats in history. With 2000 men, of whom only 400 were Europeans, he encountered an army of 35,000 hardy and well-armed Beloochees. It was an act, apparently, of the most daring temerity, but the general had faith in himself

and in his men. He charged the Belooch centre up a high bank which formed their rampart in front, and for three mortal hours the battle raged. Each man of that small force, inspired by the chief, became for the time a hero. The Beloochees, though twenty to one, were driven back, but with their faces to the foe. It is this sort of pluck, tenacity, and determined perseverance which wins soldiers' battles, and, indeed, every battle. It is the one neck nearer that wins the race and shows the blood; it is the one march more that wins the campaign; the five minutes' more persistent courage that wins the fight. Though your force be less than another's, you equal and outmaster your opponent if you continue it longer and concentrate it more. The reply of the Spartan father, who said to his son, when complaining that his sword was too short, "Add a step to it," is applicable to everything in life.

Napier took the right method of inspiring his men with his own heroic spirit. He worked as hard as any private in the ranks. "The great art of commanding," he said, "is to take a fair share of the work. The man who leads an army cannot succeed unless his whole mind is thrown into his work. The more trouble, the more labour must be given; the more danger, the more pluck must be shown, till all is overpowered." A young officer, who accompanied him in his campaign in the Cutchee Hills, once said, "When I see that old man incessantly on his horse, how can I be idle who am young and strong? I would go into a loaded cannon's mouth if he ordered me." This remark, when repeated to Napier, he said was ample reward for his toils. The anecdote of his interview with the Indian juggler strikingly illustrates his cool courage as well as his remarkable simplicity and honesty of character. After the Indian battles, on one occasion a famous juggler visited the camp, and performed his feats before the General, his family, and staff. Among other performances, this man cut in two with a stroke of his sword a lime or lemon placed in the hand of his assistant. Napier thought there

was some collusion between the juggler and his retainer. To divide by a sweep of the sword on a man's hand so small an object without touching the flesh he believed to be impossible, though a similar incident is related by Scott in his romance of the 'Talisman.' To determine the point, the General offered his own hand for the experiment, and he stretched out his right arm. The juggler looked attentively at the hand, and said he would not make the trial. "I thought I would find you out!" exclaimed Napier. "But stop," added the other, "let me see your left hand." The left hand was submitted, and the man then said firmly, "If you will hold your arm steady I will perform the feat." "But why the left hand and not the right?" "Because the right hand is hollow in the centre, and there is a risk of cutting off the thumb; the left is high, and the danger will be less." Napier was startled. "I got frightened," he said; "I saw it was an actual feat of delicate swordsmanship, and if I had not abused the man as I did before my staff, and challenged him to the trial, I honestly acknowledge I would have retired from the encounter. However, I put the lime on my hand, and held out my arm steadily. The juggler balanced himself, and, with a swift stroke cut the lime in two pieces. I felt the edge of the sword on my hand as if a cold thread had been drawn across it; and so much (he added) for the brave swordsmen of India, whom our fine fellows defeated at Meeanee."

The recent terrible struggle in India has served to bring out, perhaps more prominently than any previous event in our history, the determined energy and self-reliance of the national character. Although English officialism may often drift stupidly into gigantic blunders, the men of the nation generally contrive to work their way out of them with a heroism almost approaching the sublime. In May, 1857, when the revolt burst upon India like a thunder-clap, the British forces had been allowed to dwindle to their extreme minimum, and were scattered over a wide extent of country, many of them in remote cantonments.

The Bengal regiments, one after another, rose against their officers, broke away, and rushed to Delhi. Province after province was lapped in mutiny and rebellion ; and the cry for help rose from east to west. Everywhere the English stood at bay in small detachments, beleaguered and surrounded, apparently incapable of resistance. Their discomfiture seemed so complete, and the utter ruin of the British cause in India so certain, that it might be said of them then, as it had been said before, "These English never know when they are beaten." According to rule, they ought then and there to have succumbed to inevitable fate.

While the issue of the mutiny still appeared uncertain, Holkar, one of the native princes, consulted his astrologer for information. The reply was, "If all the Europeans save one are slain, that one will remain to fight and reconquer." In their very darkest moment—even where, as at Lucknow, a mere handful of British soldiers, civilians, and women, held out amidst a city and province in arms against them—there was no word of despair, no thought of surrender. Though cut off from all communication with their friends for months, and they knew not whether India was lost or held, they never ceased to have perfect faith in the courage and devotedness of their countrymen, though they might be afar off ; they knew that while a body of men of English race held together in India, they would not be left unheeded to perish. They never dreamt of any other issue but retrieval of their misfortune and ultimate triumph ; and if the worst came to the worst, they could but fall at their post and die in the performance of their duty. Need we remind the reader of the names of Havelock, Neill, and Outram, men of each of whom it might with equal appropriateness be said that he had the heart of a chevalier, the soul of a believer, and the temperament of a martyr. Of each it might be said that their lives had been spent in the patient performance of obscure services ; but the outbreak of the rebellion provided them with the opportunity of proving that each had in him the qualities of a

hero. Indeed the same might be said of every private soldier who distinguished himself in that great struggle. Desperate though the work was of retrieving this terrible and wide-spread calamity, there were men found to do it—men whose lives until then had for the most part been spent in the performance of mere routine duties, whose names had never before been heard of, and who might have died unknown but for the occasion which put their highest qualities to the proof, as well-bred, brave-hearted, high-souled Englishmen. In the course of the struggle which ensued, an amount of individual energy was displayed of an extraordinary and perhaps even an unexpected character; and men and women, soldiers and civilians, of all ranks, in the revolted districts, swelled for the time to the dimensions of heroes.

It has been said that Delhi was taken, and India saved, by the personal character of Sir John Lawrence. The very name of "Lawrence" represented power in the North-West Provinces. His standard of duty, zeal, and personal effort, was of the highest; and every man who served under him seemed to be inspired by his own spirit. It was declared of him that his character alone was worth an army. The same might be said of his brother Sir Henry, who organized the Punjaub force that took so prominent a part in the capture of Delhi. Both brothers inspired those who were about them with perfect love and confidence. Both lived amongst the people, and powerfully influenced them for good. Above all, as Colonel Edwardes says, "they drew models on young fellows' minds, which they went forth and copied in their several administrations: they sketched a *faith*, and begot a *school*, which are both living things at this day." Sir John Lawrence had by his side such men as Montgomery, Nicholson, Cotton, and Edwardes, as prompt, decisive, and high-souled as himself. John Nicholson was one of the finest, manliest, and noblest of men—"every inch a hakim," the natives said of him—"a tower of strength," as he was characterized by Lord Dalhousie. In

whatever capacity he acted he was great, because he acted with his whole strength and soul. A brotherhood of fakeers—borne away by their enthusiastic admiration of the man—even commenced the worship of Nikkil Seyn: he had some of them punished for their folly, but they continued the worship nevertheless. Of his sustained energy and persistency an illustration may be cited in his pursuit of the 55th Sepoy mutineers, when he was in the saddle for twenty consecutive hours, and travelled more than seventy miles. When the enemy set up their standard at Delhi, Lawrence and Montgomery, relying on the support of the people of the Punjaub, and compelling their admiration and confidence, strained every nerve to keep their own province in perfect order, whilst they hurled every available soldier, European and Sikh, against that city. Sir John wrote to the commander-in-chief to “hang on to the rebels’ noses before Delhi,” whilst the troops pressed on by forced marches under Nicholson, “the tramp of whose war-horse might be heard miles off,” as was afterwards said of him by a rough Sikh who wept over his grave.

The siege and storming of Delhi was the most illustrious event which occurred in the course of that gigantic struggle. The leaguer of Lucknow, during which the merest skeleton of a British regiment—the 32nd—held out for six months against two hundred thousand armed enemies, has perhaps excited more intense interest; but Delhi was the feat of arms of which Britain has most cause to be proud. There too the British were really the besieged, though ostensibly the besiegers; they were a mere handful of men “in the open”—not more than 3,700 bayonets, European and native—without any defences or support, other than their indomitable courage and tenacity of purpose, assailed from day to day by an army of rebels numbering at one time as many as 75,000 men, trained to European discipline by English officers, and supplied with all but exhaustless munitions of war. The heroic little band sat down before the city under the burning rays of a tropical sun. Death,

wounds, and fever, failed to turn them from their purpose. Thirty times they were attacked by overwhelming numbers, and thirty times did they drive back the enemy behind their defences. As Captain Hodson—himself one of the bravest there—has said, “I venture to aver that no other nation in the world would have remained here, or avoided defeat if they had attempted to do so.” Never for an instant did these heroes falter at their work; with sublime endurance they held on, fought on, and never relaxed until, dashing through the “imminent deadly breach,” the place was won, and the British flag was again unfurled on the walls of Delhi. All were great—privates, officers, and generals; men taken from behind English ploughs and from English workshops, and those trained in the best schools and colleges, displayed equal heroism when the emergency arose. Common soldiers who had been inured to a life of hardship, and young officers who had been nursed in luxurious homes, alike proved their manhood, and emerged from that terrible trial with equal honour; the native strength and soundness of the English race and of manly English training and discipline were never more powerfully illustrated; and it was there emphatically proved that the Men of England are, after all, its greatest products. A terrible price was paid for this great chapter in our history, but if those who survive, and those who come after, profit by the lesson and example, it may not have been purchased at too great a cost.

But not less energy and courage have been displayed by Englishmen in various other lines of action, of a more peaceful and beneficent character than that of war. Henry Martyn, William Carey, John Williams, David Livingstone, and many other equally distinguished labourers in missionary enterprise, have quite as nobly illustrated the power of energetic action in their lonely labours amidst heathen populations in India, Africa, and the islands of the Pacific.

These great missionaries all sprang from a humble position in life. Henry Martyn's father was originally a

labourer in a mine at Gwennap in Cornwall, though by industry and ability he subsequently raised himself to the position of a clerk. The boy was sent to school at Truro, and afterwards to Oxford, where he failed in obtaining the fellowship for which he tried. At St. John's, Cambridge, he was more successful; he applied himself resolutely, and came out senior wrangler in 1801. He felt that he had within him the power to achieve distinction in any line of study he might choose to embrace; but having been powerfully impressed by the preaching of the Rev. Mr. Simeon, and being brought in connection with some of the leading members of the "Clapham Sect," he determined to embrace the career of a missionary, and to carry the tidings of the Gospel into the far east. In 1805 he sailed for India under the countenance of the Missionary Society, and may be regarded as the pioneer of missionary labours in that wide field. For five years he laboured long and hard in Hindostan, translating the Bible into the Persian, Hindostanee, and Arabic, receiving but slender encouragement, and often encountering much opposition. He then proceeded into Persia, where he was stricken by fever, and, his health completely broken, he was compelled to abandon his work and return home. But he was overtaken by death before he passed the frontier of Asia Minor, expiring at Fokat, in 1812, when only in his thirty-second year.

Equal energy and self-devotion in the same career were displayed by John Williams, the martyr of Erromanga. Though considered a dull boy, he was yet handy at his trade, and possessed of good physical stamina. He was apprenticed to a furnishing ironmonger in the City Road, and for some time was rather disposed to join in the dissipation of his companions than to occupy himself with serious thoughts. He cultivated, however, his manual skill, and was often, in his leisure hours, found at work in the blacksmith's forge of his master, who at length was accustomed to employ him upon any job requiring peculiar delicacy or skill. He also was fond of bell-hanging and other

employments which took him away from the shop. A casual sermon which he heard gave his mind a serious bias, and he became a Sunday-school teacher. The cause of missions having been brought under his notice at some of his society's meetings, he determined to devote himself to this work. His services were accepted by the London Missionary Society; and his master allowed him to leave the ironmongery shop before the expiry of his indentures. The islands of the Pacific Ocean were the scene of his labours—more particularly Huahine in Tahiti, Raiatea, and Rarotonga. Like the Apostles he worked with his hands,—at blacksmith work, gardening, shipbuilding; and he endeavoured to teach the islanders the arts of civilised life, at the same time that he instructed them in the truths of religion. It was in the course of his indefatigable labours that he was massacred by savages on the shore of Erromanga—none worthier than he to wear the martyr's crown.

The career of Dr. Livingstone is the most interesting of all. He has told the story of his own life in that modest and unassuming manner which is so characteristic of the man himself. His ancestors were poor but honest Highlanders, and it is related of one of them, renowned in his district for wisdom and prudence, that when on his death-bed he called his children round him and left them these words, the only legacy he had to bequeath—"In my lifetime," said he, "I have searched most carefully through all the traditions I could find of our family, and I never could discover that there was a dishonest man among our forefathers: if, therefore, any of you or any of your children should take to dishonest ways, it will not be because it runs in our blood; it does not belong to you: I leave this precept with you—Be honest." At the age of ten Livingstone was sent to work in a cotton factory near Glasgow as a "piecer." With part of his first week's wages he bought a Latin grammar, and began to learn that language, pursuing the study for years at a night school.

He would sit up conning his lessons till twelve or later, when not sent to bed by his mother, for he had to be up and at work in the factory every morning by six. In this way he plodded through Virgil and Horace, also reading extensively all books, excepting novels, that came in his way, but more especially scientific works and books of travels. In his pursuit of botany he occupied his spare hours, which were but few, in scouring the neighbourhood collecting plants. He even carried on his reading amidst the roar of the machinery in the mill, so placing the book upon the spinning jenny which he worked that he could catch sentence after sentence as he passed. In this way the persevering factory boy acquired much useful knowledge; and as he grew older, the desire possessed him of becoming a missionary to the heathen. With this object he set himself to obtain a medical education, in order the better to be qualified for the enterprise. He accordingly economised his earnings, and saved as much money as enabled him to support himself while attending the Medical and Greek classes, as well as the Divinity Lectures, at Glasgow, for several winters, working as a cotton spinner during the remainder of each year. He thus supported himself, during his college career, entirely by his own earnings as a factory workman, never having received a farthing of help from any other source. "Looking back now," he honestly says, "at that life of toil, I cannot but feel thankful that it formed such a material part of my early education; and, were it possible, I should like to begin life over again in the same lowly style, and to pass through the same hardy training." At length he finished his medical curriculum, wrote his Latin thesis, passed his examinations, and was admitted a licentiate of the Faculty of Physicians and Surgeons. At first he thought of going to China, but the war then raging with that country prevented his following out that idea; and having offered his services to the London Missionary Society, he was by them sent out to Africa, which he reached in 1840. He had intended to proceed to

China by his own efforts; and he says the only pang he had in going to Africa at the charge of the London Missionary Society was, because "it was not quite agreeable to one accustomed to work his own way to become, in a manner, dependent upon others." Arrived in Africa he set to work with great vigour. He could not brook the idea of merely entering upon the labours of others, but cut out a large sphere of independent work, preparing himself for it by undertaking manual labour in building and other handicraft employment, in addition to teaching, which, he says, "made me generally as much exhausted and unfit for study in the evenings as ever I had been when a cotton-spinner." Whilst labouring amongst the Bechuanas, he dug canals, built houses, cultivated fields, reared cattle, and taught the natives while he worked with them. At first, when starting with a party of them on foot upon a long journey, he overheard their observations upon his appearance and powers—"He is not strong," said they; "he is quite slim, and only appears stout because he puts himself into those bags (trowsers); he will soon knock up." This caused the missionary's Highland blood to rise, and made him despise the fatigue of keeping them all at the top of their speed for days together, until he heard them expressing proper opinions of his pedestrian powers. What he did in Africa, and how he worked, may be learnt from his own 'Missionary Travels,' one of the most fascinating books of its kind that has ever been given to the public. One of his last known acts is thoroughly characteristic of the man. The 'Birkenhead' steam launch, which he took out with him to Africa, having proved a failure, he sent home orders for the construction of another at an estimated cost of 2000*l*. This sum he proposed to defray out of the means which he had set aside for his children arising from the profits of his travels. "The children must make it up themselves," was in effect his expression in sending home the order for the appropriation of the money.

The life of John Howard was throughout a striking illustration of the power of patient purpose and action. His sublime life proved that even physical weakness could remove mountains in the pursuit of an end recommended by duty. The idea of ameliorating the condition of prisoners engrossed his whole thoughts and possessed him like a passion; and no toil, nor danger, nor bodily suffering could turn him from that great purpose of his life. Though a man of no genius and but moderate talent, his heart was pure and his will was strong; even in his own time he achieved a remarkable degree of success; but his influence did not die with him, for it has continued powerfully to affect not only the legislation of England, but of all civilized nations, even to the present hour. The life of Howard is, however, so well known through the labours of Mr. Hepworth Dixon, that we prefer citing a few less known illustrations of this characteristic feature in the English character.

Jonas Hanway was a man eminent in his own day for his integrity as a merchant and his public spirit as a patriot and philanthropist; though his name is now all but unknown. He was one of the many patient and persevering men who have made England what it is—content simply to do with energy the work they have been appointed to do, and to go to their rest thankfully when it is done—

“Leaving no memorial but a world
Made better by their lives.”

He was born in 1712, at Portsmouth, where, his father, a storekeeper in the dockyard, being killed by an accident, he was left an orphan at an early age. His mother removed with her family to London, where she had them put to school, and struggled hard to bring them up respectably. At seventeen Jonas was sent to Lisbon to be apprenticed to a merchant, where his close attention to business, his punctuality, and his strict honour and integrity, gained for him the respect and esteem of all who knew him. He returned to London, and in 1743 accepted the offer of a

partnership in an important mercantile house at St. Petersburg, extensively engaged in the Caspian trade, then in its infancy. Mr. Hanway went out to Russia for the purpose of extending the business; and shortly after his arrival he found it necessary to visit the principal seats of the trade in person. He accordingly set out for Persia, with a caravan of English bales of cloth making twenty carriage loads. In ten days from St. Petersburg he reached Moscow, seven days after he entered the Steppe, and in other eight days he reached Zuritzen on the Volga. There he embarked for Astracan, and with difficulty escaped the perils of the passage down the river, which was then infested by gangs of robber-boatmen, who lived by plundering the traders. From Astracan he sailed for Astrabad, on the south-eastern shore of the Caspian, where he had scarcely landed his bales, when an insurrection broke out, his goods were seized, and though he afterwards recovered the principal part of them, the fruits of his enterprise were in a great measure lost. A plot was even set on foot to seize himself and his party; so he timely took to sea, and after encountering great perils and exposure in an open boat, which he bore with exemplary patience and courage, he reached Ghilan in safety. His escape on this occasion gave him the first idea of the words which he afterwards adopted as the motto of his life—"Never Despair." After travelling many hundred miles amidst hostile bands, he prepared to leave the country, but invested the money which he had realized by the sale of his partly recovered goods in the purchase of raw silk, which eventually proved a successful venture. He afterwards resided in St. Petersburg for five years, carrying on a lucrative and prosperous business.

A relative having left him some property, and his means being sufficient to enable him to return to England, Hanway left Russia, and arrived in his native country in 1750, after an absence of about eight years. His object in returning to England was, as he himself expressed it, "to consult his own health (which was extremely delicate), and

do as much good to himself and others as he was able." The rest of his life was spent in deeds of active benevolence and usefulness to his fellow men. He lived in a quiet style, in order that he might employ a larger share of his income in purposes of benevolence. One of the first public improvements to which he devoted himself was that of the highways of the metropolis. The streets of London were then in a wretched state—ill paved, full of ruts and holes, and filthy in the extreme. Sign-boards swung creakingly over the footways beneath, which were enclosed from the carriage-way by rows of posts; but the space was so narrow that there was barely room for one person to pass another on foot, and in wet weather torrents of dirty water fell upon the passengers from the projecting spouts on either side the street. Mr. Hanway took up the subject with great vigour, and urged the necessity for improvement so pertinaciously, that at length he secured the interference of the Legislature. An accident which happened to the carriage of the Speaker of the House of Commons (Mr. Onslow), in passing through the narrow entrance near Craig's Court, at Charing Cross, contributed to force the subject on public attention, and the act appointing commissioners was passed; since which the streets of London have become as creditable to the wealth of the metropolis as they were formerly a disgrace.

The old and often recurring rumour of a French invasion having come up in 1755, and a formidable squadron and large body of forces having been assembled at Brest, for the ostensible purpose of making a descent upon this country, Mr. Hanway turned his attention to the best mode of keeping up our breed of seamen. The Act passed in Queen Anne's reign, directing every master of a vessel of thirty tons and upwards to take one or more apprentices from the parish, being found inoperative, Mr. Hanway endeavoured by sundry printed letters to urge the masters in the merchant service to comply with the directions of the Act; but the single voice of an individual was too feeble to be heard

where self-interest was concerned. Determined, however, to do what he could to remedy the defect, Hanway summoned a meeting of merchants and shipowners at the Royal Exchange, and there proposed to them to form themselves into a society for fitting out landmen volunteers and boys, to serve on board the king's ships. The proposal was received with enthusiasm: a society was formed, and officers were appointed, Mr. Hanway directing its entire operations. The result was the establishment in 1756 of The Marine Society, an institution which has proved of real national advantage, and to this day is of great and substantial utility. Six years after the society was formed, 5451 boys and 4787 landmen volunteers had been fitted out by the society and added to the navy, and to this day it is in active operation, about 600 poor boys, after a careful education, being annually apprenticed as sailors, principally in the merchant service.

Mr. Hanway devoted the other portions of his spare time to improving or establishing important public institutions in the metropolis. From an early period he took an active interest in the Foundling Hospital, which had been started by one Thomas Coram many years before. A charter had been obtained in 1739, and an hospital was erected for the reception of foundlings in 1742-9. The institution was supported with munificent zeal; not less than 10,000*l.* was collected at the musical performances under Handel, who also presented an organ to the chapel, and the score of his 'Messiah' to the guardians. Parliament granted 10,000*l.*, and the funds at the disposal of the institution were so abundant that the guardians opened their doors to receive "all children not exceeding two months old which should be offered." The consequence was, that an immense number of children were sent in, whose parents were themselves sufficiently able to maintain and educate them. Though the foundling sentiment was the fashion, like many other sentiments without sense, it threatened soon to do far more harm than good; and it began to be feared that the humanity

might even prove inhuman. Mr. Hanway was one of the first to point out this: he saw that by holding out to selfish parents the prospect of getting their children provided for and taken care of by the hospital, the tendency was to promote licentiousness, as well as to sever the natural tie which binds together the family; and he accordingly paid 50*l.* to qualify himself as a governor, in order that he might be in a better position to take steps to stem the evil. He entered upon this work in the face of the fashionable philanthropy of the time; holding to his purpose until he had brought the charity back to its proper objects; and time and experience have amply proved that he was in the right. In 1771 Parliament withdrew its grants, and the hospital has since been left to the support of private charity, which has proved amply sufficient, whilst every security is taken that the objects of the institution are not abused. The Magdalen Hospital was also established, in a great measure through Mr. Hanway's exertions, in 1758; and there is reason to believe that this institution has been the means of restoring many poor women to virtuous courses, who would otherwise have been lost. Mr. Hanway was accustomed to invite to his house those who had been recovered through its instrumentality, on which occasions he endeavoured to strengthen and uphold them in their good resolutions, while he kindly watched over their well-doing in life.

But Jonas Hanway's most laborious and persevering efforts were in behalf of the infant parish poor. The subsequent labours of Howard in behalf of prisoners were not more honourable to him, than were those of Hanway in behalf of the helpless and innocent offspring of the unfortunate. The misery and neglect amidst which the children of the parish poor then grew up, and the mortality which prevailed amongst them, were positively frightful; but there was no fashionable movement on foot to remedy the evil, as in the case of the foundlings. So Jonas Hanway summoned his individual energies to the task. Alone and

unassisted he first endeavoured to ascertain by personal inquiry the extent of the evil. He explored the miserable and unhealthy dwellings of the poorest classes in London, and visited the poorhouse sick wards, by which he carefully ascertained the management in detail of every workhouse in and near the metropolis. In order then to ascertain in what manner the legislators of foreign countries had dealt with a similar evil, he made a journey into France, through Holland, visiting all the public houses for the reception of the poor on his way, and noting whatever he thought might be adopted at home with advantage. He was thus employed for five years; and on his return to England, at intervals, he published the result of his observations; but his accounts were so melancholy that they were generally disbelieved, and he made many enemies in consequence of having ventured to publish the names of every parish officer, of whatever rank in life, under whose hands any infants had died of neglect. It appeared that in one workhouse, in St. Clement Danes, one nurse had twenty-three poor children committed to her care in the year 1765, of whom eighteen had died, two were discharged, and only three remained alive. Of seventy-four children received into the workhouse of St. Andrew and St. George, Holborn, sixty-four had died during the same year. In some populous parishes, not a single child was found alive at the end of twelve months: all had died. Wherever his statements were disputed, he published the names of the children, the date of each birth and admission, the time the child had lived, and the name of its nurse. He next made a journey throughout England, to compare the mortality in country workhouses with that of the metropolis; and everywhere he found the same excessive mortality, arising from over-crowding, ill ventilation, and neglect. The publication of such striking facts, and the known integrity of the man, could not fail to produce an effect even upon the most indifferent; and many workhouses speedily became reformed and improved. In 1761 he had obtained an Act obliging every London

parish to keep an annual register of all the infants received, discharged, and dead; and he took care that the Act should work, for he himself superintended its working with indefatigable watchfulness. He went about from workhouse to workhouse in the morning, and from one member of parliament to another in the afternoon, for day after day, and for year after year, enduring every rebuff, answering every objection, and accommodating himself to every humour. At length, after a perseverance hardly to be equalled, and after nearly ten years' labour, he obtained an Act, at his own sole expense (7 Geo. III. c. 39), directing that all parish infants belonging to the parishes within the bills of mortality shall not be nursed in the workhouses, but be sent to nurse a certain number of miles out of town, until they are six years old, under the care of guardians, to be elected triennially. The poor people called this "the Act for keeping children alive;" and the registers for the years which followed its passing, as compared with those which preceded it, showed that thousands of lives had been preserved through the judicious interference of this good and sensible man.

Wherever a philanthropic work was to be done in London, be sure that Jonas Hanway's hand was in it. One of the first Acts for the protection of chimney-sweepers' boys was obtained through his influence.* A destructive fire at Montreal, and another at Bridgetown, Barbadoes, afforded him the opportunity for raising a timely subscription for the relief of the sufferers. His name appeared in every

* While exerting himself on behalf of the little sweeps, one day he said to a little fellow who had been sweeping a chimney in his own house, "Suppose now I give you a shilling?" "God Almighty bless your honour, and thank you." "And what if I give you a fine tie wig to wear on May-day, which is just at hand?" "Ah, bless your honour! my master won't let me go out on May-day." "No! why not?" "He says *it's low life*." Mr. Hanway was a religious man, and on one occasion, when hiring a coachman, and telling him the duty he required, he concluded, "You will attend with the rest of the family every evening at prayers." "Prayers, sir!" "Why, did you never say your prayers?" asked Mr. Hanway. "I have never been in a praying family," answered the man. "But have you any objection to say your prayers?" "No, sir, I've no objection; *I hope you'll consider it in my wages.*"

list, and his disinterestedness and sincerity were universally recognised. But he was not suffered to waste his little fortune entirely in the service of others. Five leading citizens of London, headed by Mr. Hoare, the banker without Mr. Hanway's knowledge, waited on Lord Bute, then minister, in a body; and in the names of their fellow-citizens, requested that some notice might be taken of this good man's disinterested services to his country. The result was, his appointment shortly after, as one of the commissioners for victualling the navy.

One of the minor social evils against which Mr. Hanway lifted up his voice, was the custom of what was called *vails-giving*,—or the gratuities then paid by visitors at the houses which they frequented, and which the servants had come to regard as a right. Mr. Hanway was on one occasion thus paying the servants of a respectable friend with whom he had dined, one by one as they appeared: "Sir, your great coat,"—*a shilling*: "Your hat,"—*shilling*: "Stick,"—*shilling*: "Umbrella,"—*shilling*: "Sir, your gloves." "Why, friend," said he, "you may keep the gloves, they are not worth a shilling." This absurd practice was eventually put down by satire,—and the death-blow was given to it by Dodsley's 'High Life below Stairs.'

Towards the close of his life Mr. Hanway's health became very feeble, and although he found it necessary to resign his office at the Victualling Board, he could not be idle; but worked away at the establishment of Sunday Schools,—a movement then in its infancy,—or in relieving poor blacks, many of whom then wandered destitute about the streets of the metropolis,—or, in alleviating the sufferings of some neglected and destitute class of society. Notwithstanding his familiarity with misery in all its shapes, he was one of the most cheerful of beings; and, but for his cheerfulness he could never, with so delicate a frame, have got through so vast an amount of self-imposed work. He dreaded nothing so much as inactivity. Though fragile, he was bold and indefatigable; and his moral courage was of the first order. It may be

regarded as a trivial matter to mention that he was the first who ventured to walk the streets of London with an umbrella over his head. But let any modern London merchant venture to walk along Cornhill in a peaked Chinese hat, and he will find it takes some degree of moral courage to persevere in it. After carrying an umbrella for thirty years, Mr. Hanway saw the article at length come into general use.

Hanway was a man of strict honour, truthfulness, and integrity; and everything he said might be relied upon. He had so great a respect, amounting almost to a reverence, for the character of the honest merchant, that it was the only subject upon which he was ever seduced into a eulogium. He strictly practised what he professed, and both as a merchant, and afterwards as a commissioner for victualling the navy, his conduct was without stain. He would not accept the slightest favour of any sort from a contractor; and when any present was sent to him whilst at the Victualling Office, he would politely return it, with the intimation that "he had made it a rule not to accept anything from any person engaged with the office." When, at the age of seventy-four, he found his vital powers failing, he prepared for death with as much cheerfulness as he would have prepared himself for a journey into the country. He sent round and paid all his tradesmen, took leave of his friends, arranged his affairs, had his person neatly disposed of, and his last breath escaped him in the midst of a sentence which began with the word "Christ." The property which he left did not amount to two thousand pounds, and, as he had no relatives who wanted it, he divided it amongst sundry orphans and poor persons whom he had befriended during his lifetime. Such, in brief, was the beautiful life of Jonas Hanway,—as honest, energetic, hard-working, and true-hearted a man as ever lived.

The life of Granville Sharp is another striking example of the same power of individual energy—a power which was afterwards transfused into the noble band of workers in the cause of Slavery Abolition, prominent among whom

were Clarkson, Wilberforce, Buxton, and Brougham. But, giants though these men were in this cause, Granville Sharp was the first, and perhaps the greatest of them all, in point of perseverance, energy, and intrepidity. He began life as apprentice to a linen-draper on Tower Hill; but, leaving that business after his apprenticeship was out, he next entered as a clerk in the Ordnance Office; and it was while engaged in that humble position that he carried on in his spare hours the work of Negro Emancipation. He was always, even when an apprentice, ready to undertake any amount of volunteer labour where any useful purpose was to be served. Thus, while learning the linen-drapery business, a fellow apprentice, who lodged in the same house, and was a Unitarian, led him into frequent discussions on religious subjects; in the course of which the Unitarian youth insisted that Granville's Trinitarian misconception of certain passages of Scripture arose from his want of acquaintance with the Greek tongue; on which he immediately set to work in his evening hours, and shortly acquired an intimate knowledge of Greek. A similar controversy with another fellow-apprentice, a Jew, as to the interpretation of the prophecies, led him in like manner to undertake and overcome the difficulties of Hebrew.

But the circumstance which gave the bias and direction to the main labours of his life, originated in his generosity and benevolence. It was in this wise. His brother William, a surgeon in Mincing Lane, gave gratuitous advice to the poor, and amongst the numerous applicants for relief at his surgery was a poor African named Jonathan Strong. It appeared that the negro had been so brutally treated by his master, a Barbadoes lawyer then in London, that he had been thereby rendered lame and almost blind, and was altogether unable to work; and his owner, regarding him as no longer of the slightest value as a chattel, but likely only to involve him in expense, cruelly turned him adrift into the streets of London. This poor man, a mass of disease, supported himself by begging for a time, until he

found his way to William Sharp, who gave him some medicine, and shortly after got him admitted to St. Bartholomew's hospital, where he was cured. On coming out of the hospital, the two brothers supported the negro in order to keep him off the streets, but they had not the least suspicion at the time that any one had a claim upon his person. They even succeeded in obtaining a situation for Strong with an apothecary, in whose service he remained for two years; and it was while he was attending his mistress behind a hackney coach, that his former owner, the Barbadoes lawyer, recognised him, and determined to recover possession of the slave, again rendered valuable by the restoration of his health. The lawyer employed two of the Lord Mayor's officers to apprehend Strong, and he was lodged in the Compter, until he could be shipped off to the West Indies. The negro, bethinking him in his captivity of the kind services which Granville Sharp had rendered him in his great distress some years before, despatched a letter to him requesting his help. Sharp had forgotten the name of Strong, but he sent a messenger to make inquiries, who returned saying that the keepers denied having any such person in their charge. His suspicions were roused, and he went forthwith to the prison, and insisted upon seeing Jonathan Strong. He was admitted, and recognised the poor negro, now in custody as a recaptured slave. Mr. Sharp charged the master of the prison at his own peril not to deliver up Strong to any person whatever, until he had been carried before the Lord Mayor, to whom Sharp immediately went, and obtained a summons against those persons who had seized and imprisoned Strong without a warrant. The parties appeared before the Lord Mayor accordingly, and it appeared from the proceedings that Strong's former master had already sold him to a new one, who produced the bill of sale and claimed the negro as his property. As no charge of offence was made against Strong, and as the Lord Mayor was incompetent to deal with the legal question as to Strong's

liberty or otherwise, he discharged him, and the slave followed his benefactor out of court, no one daring to touch him. The man's owner immediately gave Sharp notice of an action to recover possession of his negro slave, of whom he had been robbed; and now commenced that protracted and energetic movement in favour of the enslaved negro, which forms one of the brightest pages in English history.

About this time (1767), the personal liberty of the Englishman, though cherished as a theory, was subject to grievous infringements, and was almost daily violated. The impressment of men for the sea service was constantly practised, and, besides the press-gangs, there were regular bands of kidnappers employed in London and all the large towns of the kingdom, to seize men for the East India Company's service. And when the men were not wanted for India, they were shipped off to the planters in the American colonies. Negro slaves were openly advertised for sale in the London and Liverpool newspapers. For instance, the *Gazetteer*, of April 18th, 1769, classed together for sale, "at the Bull and Gate Inn, Holborn, a chestnut gelding, a Tim whisky, and a well-made, good-tempered black boy." Rewards were then offered, as now in the Slave States of America, for recovering and securing fugitive slaves, and for conveying them down to certain specified ships in the river. That no shame was felt at the open recognition of slavery, is apparent from an advertisement in the *Daily Advertiser*, of the 16th May, 1768, offering a reward to whoever would apprehend a negro boy and bring him, or send tidings of him, to Mr. Alderman Beckford, in Pall Mall. The *Public Advertiser*, of the 28th November, 1769, contains this advertisement:—"To BE SOLD, a black girl, the property of J. B——, eleven years of age, who is tolerably handy, works at her needle tolerably, and speaks English perfectly well; is of an excellent temper, and willing disposition.—Inquire of Mr. Owen, at the Angel Inn, behind St. Clement's church, in the Strand." Such was the state of matters when Gran-

ville Sharp threw himself, body and soul, into his great work. Though only a clerk in a public office, without any personal influence whatever, and armed only with integrity and boldness in a good cause, he was enabled in the issue effectually to vindicate the personal liberty of the subject, and to establish as a fact what up to that time had been but a theory—that the slave who sets his foot on British ground becomes at that instant free!

As yet the position of the reputed slave in England was undefined and doubtful. The judgments which had been given in the courts of law were fluctuating and various, resting on no settled principle. Although it was a popular belief that no slave could breathe in England, there were legal men of great eminence who had expressed a directly contrary opinion. Thus, Mr. Yorke, Attorney-General, and Mr. Talbot, Solicitor-General of England, in 1729, concurred in the decided opinion that the slave by coming into England did *not* become free; that his owner's property in him was in no respect determined or varied; and that his master might legally compel the slave to return again to the plantations. The lawyers to whom Mr. Sharp resorted for advice, in defending himself in the action raised against him in the case of Jonathan Strong, generally concurred in this view, and he was further told by Jonathan Strong's owner, that the eminent Lord Chief Justice Mansfield, and all the leading counsel, were decidedly of the same opinion. Such information would have caused despair in a mind less courageous and earnest than that of Granville Sharp; but it only served to stimulate his resolution to depend mainly upon his own efforts in the arduous battle which now lay before him. "Thus forsaken," he said, "by my professional defenders, I was compelled, through the want of regular legal assistance, to make a hopeless attempt at self-defence, though I was totally unacquainted either with the practice of the law or the foundations of it, having never opened a law book (except the Bible) in my life, until that time, when I most

reluctantly undertook to search the indexes of a law library, which my bookseller had lately purchased."

The whole of his time during the day was occupied with the business of the ordnance department, where he held the most laborious post in the office; he was therefore under the necessity of conducting his new studies late at night or early in the morning. He confessed that he was himself becoming a sort of slave. Writing to a clerical friend, to excuse himself for delay in replying to a letter, he said, "I profess myself entirely incapable of holding a literary correspondence. What little time I have been able to save from sleep at night, and early in the morning, has been necessarily employed in the examination of some points of law, which admitted of no delay, and yet required the most diligent researches and examination in my study. And I have not scrupled to employ now and then even the leisure of a Sunday in this manner, because my labour has not been for profit, but merely with a view to do good and prevent injustice, by pointing out some notorious corruptions in the beaten paths of the law, which has enabled me to serve a few individuals, I hope with good effect."

In pursuance of his resolution, now fully formed, he gave up every leisure moment that he could command during the next two years, to the close study of the laws of England affecting personal liberty,—wading through an immense mass of dry and repulsive literature, worse than Dryasdust, and making extracts of all the most important Acts of Parliament, decisions of the courts, and opinions of eminent lawyers, as he went along. In this tedious and protracted inquiry he had no instructor, nor assistant, nor adviser. He could not find a single lawyer whose opinion was favourable to his undertaking. The results of his inquiries were, however, as gratifying to himself, as they were surprising to the gentlemen of the law. "God be thanked," he wrote, "there is nothing in any English law or statute—at least that I am able to find out—that can justify the enslaving of others." He thought he now saw a clear

solution of the difficulties which had embarrassed the former trials of negro cases. He had bottomed the whole inquiry, and found that a slave really could not breathe in England. He had planted his foot firm, and now he doubted nothing. He drew up the result of his studies in a summary form; it was a plain, clear, and manly statement, entitled, 'On the Injustice of Tolerating Slavery in England;' and numerous copies, made by himself, were circulated by him amongst the most eminent lawyers of the time. Strong's owner, finding the sort of man he had to deal with, invented various pretexts for deferring the suit against Sharp, and at length offered a compromise, which was rejected. Granville went on circulating his manuscript tracts among the lawyers, until at length those employed against Jonathan Strong were deterred from proceeding further, and the result was, that the plaintiff was compelled to pay treble costs for not bringing forward his action. The tract was then printed in 1769.

The vindication of the emancipated Jonathan Strong naturally led Mr. Sharp on to the study of the general subject of the Slave Trade, and he addressed a letter to the Archbishop of Canterbury imploring his grace's powerful assistance,—which does not seem, however, to have been then responded to. In the mean time other cases occurred of the kidnapping of negroes in London, and their shipment to the West Indies for sale. Wherever Sharp could lay hold of any such case, he at once took proceedings to rescue the negro. Thus the wife of one Hylas, an African, was seized, and despatched to Barbadoes; on which Sharp, in the name of Hylas, instituted legal proceedings against the aggressor, obtained a verdict with damages, and Hylas's wife was brought back to England free. Sharp's mind became fully awakened to the magnitude of the abuse against which he was contending as yet single-handed, and he watched anxiously on every side to prevent an accumulation of the evil.

Another forcible capture of a negro, attended with great

cruelty, having occurred in 1770, he immediately set himself on the track of the aggressors. An African, named Lewis, was seized one dark night by two watermen employed by the person who claimed the negro as his property, dragged into the water, hoisted into a boat, where he was gagged, and his limbs were tied; and then rowing down river, they put him on board a ship bound for Jamaica, where he was to be sold for a slave upon his arrival in the island. The cries of the poor negro had, however, attracted the attention of some neighbours,—the house adjoining that from which the man had been torn being then occupied by Mrs. Banks, the mother of the afterwards celebrated Sir Joseph Banks,—and on the next morning the good lady proceeded direct to Mr. Granville Sharp, now known as the negroes' friend, and informed him of the outrage. Sharp immediately got a warrant to bring back Thomas Lewis, and proceeded to Gravesend, but on arrival there the ship had sailed for the Downs. A writ of Habeas Corpus was obtained, sent down to Spithead, and before the ship could leave the shores of England the writ was served. The slave was found chained to the main-mast bathed in tears, casting mournful looks on the land from which he was about to be torn; he was immediately liberated, brought back to London, and a warrant was issued against the author of the outrage. The promptitude of head, heart, and hand, displayed by Mr. Sharp in this transaction could scarcely have been surpassed, and yet he accused himself of slowness. The case was tried before Lord Mansfield—whose opinion, it will be remembered, had already been expressed as decidedly opposed to that entertained by Granville Sharp. On this occasion, Mr. Dunning, one of the counsel employed on behalf of the negro, holding up Mr. Sharp's tract in his hand, declared before the court, that he was prepared to maintain "that no man can be legally detained as a slave in this country." Lord Mansfield, however, avoided bringing the question to an issue, or offering any opinion on the legal question as to

the slave's personal liberty or otherwise, but discharged the negro because the defendant could bring no evidence that Lewis was even nominally his property.

The question of the personal liberty of the negro in England was therefore still undecided; but in the mean time Mr. Sharp continued steady in his benevolent course, and by his indefatigable exertions and promptitude of action, many more were added to the list of the rescued. At length the important case of James Somerset occurred; a case which is said to have been selected, at the mutual desire of Lord Mansfield and Mr. Sharp, in order to bring the great question involved to a clear legal issue. Somerset had been brought to England by his master, and left there. Afterwards his master sought to apprehend him and send him off to Jamaica, for sale. Mr. Sharp, as usual, at once took the negro's case in hand, and employed counsel to defend him. Lord Mansfield intimated that the case was of such general concern, that he should take the opinion of all the judges upon it. Mr. Sharp now felt that he would have to contend with all the force that could be brought against him, but his resolution was in no wise shaken. Fortunately for him, in this severe struggle, his exertions had already begun to tell: increasing interest was taken in the question, and many eminent legal gentlemen openly declared themselves to be upon his side.

The cause of personal liberty, now at stake, was fairly tried before Lord Mansfield, assisted by the three justices,—and tried on the broad principle of the essential and constitutional right of every man in England to the liberty of his person, unless forfeited by the law. It is unnecessary here to enter into any account of this great trial; the arguments extended to a great length, the cause being carried over to another term,—when it was adjourned and re-adjourned,—but at length judgment was given by Lord Mansfield, in whose powerful mind so gradual a change had been worked by the arguments of counsel, based mainly on Granville Sharp's tract, that he now declared the court to be so clearly

of one opinion, that there was no necessity for referring the case to the twelve judges. He then declared that the claim of slavery never can be supported; that the power claimed never was in use in England, nor acknowledged by the law; therefore the man James Somerset must be discharged. By securing this judgment Granville Sharp effectually abolished the Slave Trade until then carried on openly in the streets of Liverpool and London. But he also firmly established the glorious axiom, that as soon as any slave sets his foot on English ground, that moment he becomes free; and there can be no doubt that this great decision of Lord Mansfield was mainly owing to Mr. Sharp's firm, resolute, and intrepid prosecution of the cause from the beginning to the end.

It is unnecessary further to follow the career of Granville Sharp. He continued to labour indefatigably in all good works; he was instrumental in founding the colony of Sierra Leone as an asylum for rescued negroes; he laboured to ameliorate the condition of the native Indians in the American colonies. Inspired by his love of the English character and constitution, he agitated the enlargement and extension of the political rights of the English people; and he endeavoured to effect the abolition of the impressment of seamen. In this latter enterprise he encountered the vehement opposition of the great literary elephant of the day, Dr. Johnson, who trampled under foot the arguments of the humble clerk of the ordnance, whilst strongly upholding the right and the propriety of impressment. Though Sharp could not readily answer to the doctor's big bow-wow, he felt that justice and truth were on his side. "Important self-sufficiency, and the sound of big words," said Sharp, "cannot alter the nature of things. I am far from being ready at giving an immediate answer to subtle arguments, so that I may seem easily baffled; indeed, even when I am by no means convinced that they have the least weight." But Granville held that the British seaman, as well as the African negro, was entitled to the

protection of the law; and that the fact of his choosing a seafaring life did not in any way cancel his rights and privileges as an Englishman—first amongst which he ranked personal freedom. Mr. Sharp also laboured, but ineffectually, to restore amity between England and her colonists in America; and when the fratricidal war of the American Revolution was entered on, his sense of integrity was so scrupulous that, resolving not in any way to be concerned in so unnatural a business, he resigned his situation at the Ordnance Office. Writing to Mr. Boddington, the secretary of the department, he said, “I cannot return to my ordnance duty whilst a bloody war is carried on, unjustly, as I conceive, against my fellow subjects; and yet, to resign my place would be to give up a calling which, by my close attendance to it for near eighteen years, and by my neglect of every other means of subsistence during so long a period, is now become my only profession and livelihood.” Nevertheless, he did so. Many characterized this conduct as quixotic; but in him it was the result of strong virtuous principle.

Among Sharp's subsequent labours were the establishment of the Episcopal Church in America, the founding of the Bible Society,* the Protestant Union, and others, with a similar object; but to the last he held to the great object of his life—the abolition of slavery. To carry on this work, and organize the efforts of the growing friends of this cause, the Society for the Abolition of Slavery was founded, and new men, inspired by Sharp's example and zeal, sprang forward to help him. His energy became theirs, and the self-sacrificing zeal in which he had so long

* A clergyman once wrote to him, at the early part of his life, while clerk in the Ordnance Office, urging him to enter the Church, and offering to resign in his favour a living worth 300*l.* a year. The generous offer was declined with thanks, Mr. Sharp explaining that he had not the least inclination for the employment of a minister; and even if he could flatter himself that he was at all capable of serving the cause of religion, he was of opinion that he could do so much more effectually as a layman than as a clergyman, as his motives then would be beyond question

laboured single-handed, became at length transfused into the nation itself. His mantle fell upon Clarkson, upon Wilberforce, upon Brougham, and upon Buxton, who laboured as he had done, with like energy and steadfastness of purpose, until at length slavery was abolished throughout the British dominions. But though the names last mentioned may be more frequently identified with the triumph of this great cause, the chief merit unquestionably belongs to Granville Sharp. He was encouraged by none of the world's huzzas when he entered upon his work. He stood alone, opposed to the opinion of the ablest lawyers and the most rooted prejudices of the times; and alone he fought out, by his single exertions, and at his individual expense, the most memorable battle for the constitution of this country and the liberties of British subjects, of which modern times afford a record. What followed was mainly the consequence of his indefatigable constancy. He lighted the torch which kindled other minds, and it was handed on until the illumination became complete.

Before the death of Granville Sharp, Clarkson had already turned his attention to the question of Negro Slavery. He had even selected it for the subject of a college Essay; and his mind became so possessed by it that he could not shake it off. The spot is pointed out near Wade's Mill, in Hertfordshire, where, alighting from his horse one day, he sat down disconsolate on the turf by the road side, and after long thinking, determined to devote himself wholly to the work. He translated his Essay from Latin into English, added fresh illustrations, and published it. Then fellow labourers gathered round him. The Society for Abolishing the Slave Trade, unknown to him, had already been formed, and when he heard of it he joined it. He sacrificed all his fair prospects in life to prosecute this cause. Wilberforce was selected to lead in parliament; but upon Clarkson chiefly devolved the labour of collecting and arranging the immense mass of evidence offered in support of the abolition. A curious instance of Clarkson's sleuth-hound

sort of perseverance may be mentioned. The abettors of slavery, in the course of their defence of the system, maintained that only such negroes as were captured in battle were sold as slaves, and if not so sold, then they were reserved for a still more frightful doom in their own country. Clarkson knew of the slave-hunts conducted by the slave-traders, but had no witnesses to prove it. Where was one to be found? Accidentally, a gentleman whom he met on one of his journeys, informed him of a young sailor, in whose company he had been about a year before, who had been actually engaged in one of such slave-hunting expeditions. The gentleman did not know his name, and could but indefinitely describe his person. He did not know where he was, further than that he belonged to a ship of war in ordinary, but at what port he could not tell. With this mere glimmering of information, Clarkson determined to produce this man as a witness. He visited personally all the seaport towns where ships in ordinary lay; boarded and examined every ship without success, until he came to the very *last* port, and found the young man, his prize, in the very *last* ship that remained to be visited. The young man proved to be one of his most valuable and effective witnesses.

For some years he conducted a correspondence with upwards of four hundred persons, travelling more than thirty-five thousand miles during the same time in search of evidence. He was at length disabled and exhausted by illness, brought on by his continuous exertions; but he was not borne from the field until his zeal had fully awakened the public mind, and excited the ardent sympathies of all good men on behalf of the slave.

After years of protracted struggle, the slave trade was abolished. But still another great achievement remained to be accomplished—the abolition of slavery itself throughout the British dominions. And here again determined energy won the day. Of the leaders in the cause, none was more distinguished than Fowell Buxton, who took the position

formerly occupied by Wilberforce in the House of Commons. Buxton was a dull, heavy boy, distinguished for his strong self-will, which first exhibited itself in violent, domineering, and headstrong obstinacy. His father died when he was a child; but fortunately he had a wise mother, who trained his will with great care, constraining him to obey, but encouraging the habit of deciding and acting for himself in matters which might safely be left to him. This mother believed that a strong will, directed upon worthy objects, was a valuable manly quality if properly guided, and she acted accordingly. When others about her commented on the boy's self-will, she would merely say, "Never mind—he is self-willed now—you will see it will turn out well in the end." Fowell learnt very little at school, and was somewhat of a dunce and an idler. He got other boys to do his exercises for him, while he romped and scrambled about. He returned home at fifteen, a great, growing, awkward lad, fond only of boating, shooting, riding, and field sports,—spending his time principally with the gamekeeper, a man possessed of a good heart, and an intelligent observer of life and nature, though he could neither read nor write. Buxton had capital raw material in him, but he wanted culture, training, and development. At this juncture of his life, when his habits were being formed for good or evil, he was happily thrown into the society of the Gurney family, distinguished for their fine social qualities, not less than for their intellectual culture and public-spirited philanthropy. This intercourse with the Gurneys, he used afterwards to say, gave the colouring to his life. They encouraged his efforts at self-culture; and when he went to the University of Dublin, and gained high honours there, the animating passion in his mind, he said, "was to carry back to them the prizes which they prompted and enabled me to win." He married one of the daughters of the family, and started in life, commencing as a clerk to his uncles Hanbury, the London brewers. His power of will, which made him so difficult to deal with

as a boy, now formed the backbone of his character, and made him most indefatigable and energetic in whatever he undertook. He threw his whole strength and bulk right down upon his work; and the great giant, "Elephant Buxton" they called him, for he stood some six feet four in height, became one of the most vigorous and practical of men. "I could brew," he said, "one hour,—do mathematics the next,—and shoot the next,—and each with my whole soul." There was invincible energy and determination in whatever he did. Admitted a partner, he became the active manager of the concern; and the vast business which he conducted felt his influence through every fibre, and prospered far beyond its previous success. Nor did he allow his mind to lie fallow, for he gave his evenings diligently to self-culture, studying and digesting Blackstone, Montesquieu, and solid commentaries on English law. His maxims in reading were, "never to begin a book without finishing it;" "never to consider a book finished until it is mastered;" and "to study everything with the whole mind."

When only thirty-two, Buxton entered parliament, and at once assumed that position of influence there, of which every honest, earnest, well-informed man is secure, who enters that assembly of the first gentlemen in the world. The principal question to which he devoted himself was the complete emancipation of the slaves in British colonies. He himself used to attribute the strong interest which he early felt in this question to the influence of Priscilla Gurney, one of the Earlham family,—a woman of a fine intellect and warm heart, abounding in illustrious virtues. When on her deathbed, in 1821, she repeatedly sent for Buxton, and urged him "to make the cause of the slaves the great object of his life." Her last act was to attempt to reiterate the solemn charge, and she expired in the ineffectual effort. Buxton never forgot her counsel; he named one of his daughters after her; and on the day on which she was married from his house, on the 1st of August, 1834,—the day of Negro emancipation—after his Priscilla had been

manumitted from her filial service, and left her father's home in the company of her husband, Buxton sat down and thus wrote to a friend: "The bride is just gone; everything has passed off to admiration; and *there is not a slave in the British colonies!*"

Buxton was no genius—not a great intellectual leader nor discoverer, but mainly an earnest, straightforward, resolute, energetic man. Indeed, his whole character is most forcibly expressed in his own words, which every young man might well stamp upon his soul: "The longer I live," said he, "the more I am certain that the great difference between men, between the feeble and the powerful, the great and the insignificant, is *energy—invincible determination*—a purpose once fixed, and then death or victory! That quality will do anything that can be done in this world; and no talents, no circumstances, no opportunities will make a two-legged creature a man without it."

CHAPTER VIII.

BUSINESS QUALITIES.

“Seest thou a man diligent in his business? he shall stand before kings.”
—*Proverbs of Solomon.*

“That man is but of the lower part of the world that is not brought up to business and affairs.”—*Owen Feltham.*

HAZLITT, in one of his clever essays,* represents the man of business as a mean sort of person put in a go-cart, yoked to a trade or profession; alleging that all he has to do is, not to go out of the beaten track, but merely to let his affairs take their own course. “The great requisite,” he says, “for the prosperous management of ordinary business is the want of imagination, or of any ideas but those of custom and interest on the narrowest scale.” But nothing could be more one-sided, and in effect untrue, than such a definition. Of course, there are narrow-minded men of business, as there are narrow-minded scientific men, literary men, and legislators; but there are also business men of large and comprehensive minds, capable of action on the very largest scale. As Burke said in his speech on the India Bill, he knew statesmen who were pedlers, and merchants who acted in the spirit of statesmen.

If we take into account the qualities necessary for the successful conduct of any important undertaking,—that it requires special aptitude, promptitude of action on emergencies, capacity for organizing the labours often of large numbers of men, great tact and knowledge of human nature,

* ‘On Thought and Action.’

constant self-culture, and growing experience in the practical affairs of life,—it must, we think, be obvious that the school of business is by no means so narrow as some writers would have us believe. Mr. Helps has gone much nearer the truth when he said that consummate men of business are as rare almost as great poets,—rarer, perhaps, than veritable saints and martyrs. Indeed, of no other pursuit can it so emphatically be said, as of this, that “Business makes Men.”

But it has also been a favourite fallacy with dunces in all times, that men of genius are unfitted for business pursuits. Yet Shakespeare was a successful manager of a theatre—perhaps priding himself more upon his practical qualities in that capacity than on his writing of plays and poetry. Pope was of opinion that Shakespeare’s principal object in cultivating literature was to secure an honest independence. Indeed he seems to have been altogether indifferent to literary reputation. It is not known that he superintended the publication of a single play, or even sanctioned the printing of one; and the chronology of his writings is still a mystery. It is certain, however, that he prospered in his business, and realized sufficient to enable him to retire upon a competency to his native town of Stratford-upon-Avon.

Chaucer was in early life a soldier, and afterwards an effective Commissioner of Customs, and Inspector of Woods and Crown Lands. Spenser was Secretary to the Lord Deputy of Ireland, and is said to have been very shrewd and attentive in matters of business. Milton, originally a schoolmaster, was afterwards elevated to the post of Secretary to the Council of State during the Commonwealth; and the extant Order-book of the Council, as well as many of Milton’s letters which are preserved, give abundant evidence of his activity and usefulness in that office. Sir Isaac Newton proved himself a most efficient Master of the Mint; the new coinage of 1694 having been carried on under his immediate personal superintendence. Cowper

prided himself upon his business punctuality, though he confessed that he "never knew a poet, except himself, who was punctual in anything." But against this we may set the lives of Wordsworth and Scott—the former a distributor of stamps, the latter a clerk to the Court of Session,—both of whom, though great poets, were eminently punctual and practical men of business. David Ricardo, amidst the occupations of his daily business as a London stock-jobber, in conducting which he acquired an ample fortune, was able to concentrate his mind upon his favourite subject—on which he was enabled to throw great light—the principles of political economy; for he united in himself the sagacious commercial man and the profound philosopher. We have abundant illustrations, even in our own day, of the fact that the highest intellectual power is not incompatible with the active and efficient performance of routine duties. Grote, the great historian of Greece, is a London banker. And it is not long since John Stuart Mill, one of our greatest living thinkers, retired from the Examiner's department of the East India Company, carrying with him the admiration and esteem of his fellow-officers, not on account of his high views of philosophy, but because of the high standard of efficiency which he had established in his office, and the thoroughly satisfactory manner in which he had conducted the business of his department.

The path of success in business is invariably the path of common sense. Notwithstanding all that is said about "lucky hits," the best kind of success in every man's life is not that which comes by accident. The only "good time coming" we are justified in hoping for, is that which we are capable of making for ourselves. The fable of the labours of Hercules is indeed the type of all human doing and success. Every youth should early be made to feel that if he would get through the world usefully and happily, he must rely mainly upon himself and his own independent energies. The late Lord Melbourne embodied a piece of useful advice in a letter which he wrote to Lord

John Russell, in reply to an application for a provision for one of Moore the poet's sons: "My dear John," he said, "I return you Moore's letter. I shall be ready to do what you like about it when we have the means. I think whatever is done should be done for Moore himself. This is more distinct, direct, and intelligible. Making a small provision for young men is hardly justifiable; and it is of all things the most prejudicial to themselves. They think what they have much larger than it really is; and they make no exertion. The young should never hear any language but this: 'You have your own way to make, and it depends upon your own exertions whether you starve or not.' Believe me, &c., MELBOURNE."

It is not good for human nature to have the road of life made too easy. Better to be under the necessity of working hard and faring meanly, than to have everything done ready to our hand and a pillow of down to repose upon. Indeed, to start in life with comparatively small means seems so necessary as a stimulus to work, that it may almost be set down as one of the conditions essential to success in life. Hence, an eminent judge, when asked what contributed most to success at the bar, replied, "Some succeed by great talent, some by high connexions, some by miracle, but the majority by commencing without a shilling." So is it a common saying at Manchester, that the men who are the most successful in business there are those who begin the world in their shirt sleeves; whereas those who begin with fortunes generally lose them.

We have heard of an architect of considerable accomplishments,—a man who had improved himself by long study, and travel in the classical lands of the East,—who came home to commence the practice of his profession. He determined to begin anywhere, provided he could be employed; and he accordingly undertook a business connected with dilapidations,—one of the lowest and least remunerative departments of the architect's calling. But he had the good sense not to be above his trade, and he had

the resolution to work his way upward, so that he only got a fair start. One hot day in July a friend found him sitting astride of a house roof occupied with his dilapidation business. Drawing his hand across his perspiring countenance, he exclaimed, "Here's a pretty business for a man who has been all over Greece!" However, he did his work, such as it was, thoroughly and well; he persevered until he advanced by degrees to more remunerative branches of employment, and eventually he rose to the highest walks of his profession.

Necessity is always the first stimulus to industry; and those who conduct it with prudence, perseverance, and energy, will rarely fail. Viewed in this light, the necessity of labour is not a chastisement, but a blessing,—the very root and spring of all that we call progress in individuals, and civilization in nations. It may, indeed, be questioned whether a heavier curse could be imposed on man than the complete gratification of all his wishes without effort on his part, leaving nothing for his hopes, desires, or struggles. The feeling that life is destitute of any motive or necessity for action, must be of all others the most distressing and the most insupportable to a rational being. The Marquis de Spinola asking Sir Horace Vere what his brother died of, Sir Horace replied, "He died, Sir, of having nothing to do." "Alas!" said Spinola, "that is enough to kill any general of us all."

Those who fail in life are very apt to assume the tone of injured innocence, and conclude too hastily that everybody excepting themselves has had a hand in their personal misfortunes. A literary man lately published a book, in which he described his numerous failures in business, naïvely admitting, at the same time, that he was ignorant of the multiplication table, probably because he would not take the trouble to learn it. But, instead of attributing his failures to himself, this eminent man sat down deliberately to cast all the blame upon the money-worshipping spirit of

the age. Lamartine also did not hesitate to profess his profound contempt for arithmetic; but, had it been less, probably we should not have witnessed the unseemly spectacle of the admirers of that distinguished personage engaged in collecting subscriptions for his support in his old age.

There is a Russian proverb which says that Misfortune is next door to Stupidity; and it will generally be found that men who are constantly lamenting their ill luck, are only reaping the consequences of their own neglect, mismanagement, improvidence, or want of application. Dr. Johnson, who came up to London with a single guinea in his pocket, and who once accurately described himself in his signature to a letter addressed to a noble lord, as *Impransus*, or Dinnerless, has honestly said, "All the complaints which are made of the world are unjust; I never knew a man of merit neglected; it was generally by his own fault that he failed of success."

The dictionary definition of Business shows how large a part of practical life arranges itself under this head. It is "Employment; an affair; serious engagement; something to be transacted; something required to be done." Every human being has duties to be performed, and, therefore, has need of cultivating the capacity for doing them; whether the sphere of action be the management of a household, the conduct of a trade or profession, or the government of a nation.

Attention, application, accuracy, method, punctuality, and despatch, are the principal qualities required for the efficient conduct of business of any sort. These, at first sight, may appear to be small matters; and yet they are of essential importance to human happiness, well-being, and usefulness. They are little things, it is true; but human life is made up of comparative trifles. It is the repetition of little acts which constitute not only the sum of human character, but which determine the character of nations. And where men or nations have broken down, it

will almost invariably be found that neglect of little things was the rock on which they split.

It is related of a well-known Manchester manufacturer, that, on retiring from business, he purchased a large estate from a noble lord; and it was part of the arrangement, that he was to take the house, with all its furniture, precisely as it stood. On taking possession, however, he found that a cabinet, which was in the inventory, had been removed; and on applying to the former owner about it, the latter said, "Well, I certainly did order it to be removed; but I hardly thought you would have cared for so trifling a matter in so large a purchase." "My lord," was the characteristic reply, "if I had not all my life attended to trifles, I should not have been able to purchase this estate; and, excuse me for saying so, perhaps if your lordship had cared more about trifles, you might not have had occasion to sell it."

The examples we have already given of great workers in various branches of industry, art, and science, render it unnecessary further to enforce the importance of persevering application in any department of life. It is the result of every-day experience, that steady attention to matters of detail lies at the root of human progress; and that diligence, above all, is the mother of good luck. Accuracy is also of much importance, and an invariable mark of good training in a man. Accuracy in observation, accuracy in speech, accuracy in the transaction of affairs. What is done in business must be well done; for it is better to accomplish perfectly a small amount of work, than to half-do ten times as much. A wise man used to say, "Stay a little, that we may make an end the sooner."

Too little attention, however, is paid to this highly important quality of accuracy. As a man eminent in practical science lately observed to us, "It is astonishing how few people I have met with in the course of my experience, who can *define a fact* accurately." Yet, in business affairs, it is the manner in which even small matters are transacted,

that often decides men for or against you. With virtue, capacity, and good conduct in other respects, the person who is habitually inaccurate cannot be trusted; his work has to be gone over again; and he thus causes an infinity of annoyance, vexation, and trouble. Truer words were never uttered than those spoken by Mr. Dargan, the Irish railway contractor, at a public meeting in Dublin. "I have heard a great deal," he said, "about the independence that we were to get from this, that, and the other source; yet I have always been deeply impressed with the conviction, that our industrial independence depends upon ourselves. *Simple industry and careful exactness* would be the making of Ireland. We have, it is true, made a step; but perseverance is indispensably necessary for eventual success."

It was one of the characteristic qualities of Charles James Fox, that he was thoroughly pains-taking in all that he did. When appointed Secretary of State, being piqued at some observation as to his bad writing, he actually took a writing-master, and wrote copies like a schoolboy until he had sufficiently improved himself. Though a corpulent man, he was wonderfully active at picking up cut tennis balls, and when asked how he contrived to do so, he playfully replied, "Because I am a very pains-taking man." The same accuracy in trifling matters was displayed by him in things of greater importance; and he acquired his reputation, like the painter, by "neglecting nothing."

Method is essential, and enables a larger amount of work to be got through with satisfaction. "Method," said the Reverend Richard Cecil, "is like packing things in a box; a good packer will get in half as much again as a bad one." Cecil's despatch of business was extraordinary, his maxim being, "The shortest way to do many things is to do only one thing at once;" and he never left a thing undone with a view of recurring to it at a period of more leisure. When business pressed, he rather chose to en-

croach on his hours of meals and rest than omit any part of his work. De Witt's maxim was like Cecil's: "One thing at a time." "If," said he, "I have any necessary despatches to make, I think of nothing else till they are finished; if any domestic affairs require my attention, I give myself wholly up to them till they are set in order." Despatch comes with practice. A French minister, who was alike remarkable for his despatch of business and his constant attendance at places of amusement, being asked how he contrived to combine both objects, replied, "Simply by never postponing till to-morrow what should be done to-day." Lord Brougham has said that a certain English statesman reversed the process, and that his maxim was, never to transact to-day what could be postponed till to-morrow. Unhappily, such is the practice of many besides that minister, already almost forgotten: the practice is that of the indolent and the unsuccessful. Such men, too, are apt to rely upon agents, who are not always to be relied upon. Important affairs must be attended to in person. "If you want your business done," says the proverb, "go and do it; if you don't want it done, send some one else." An indolent country gentleman had a freehold estate producing about five hundred a-year. Becoming involved in debt, he sold half the estate, and let the remainder to an industrious farmer for twenty years. About the end of the term the farmer called to pay his rent, and asked the owner whether he would sell the farm. "Will *you* buy it?" asked the owner, surprised. "Yes, if we can agree about the price." "That is exceedingly strange," observed the gentleman; "pray, tell me how it happens that, while I could not live upon twice as much land for which I paid no rent, you are regularly paying me two hundred a-year for your farm, and are able, in a few years, to purchase it." "The reason is plain," was the reply: "you sat still and said *Go*, I got up and said *Come*; you laid in bed and enjoyed your estate, I rose in the morning and minded my business."

Sir Walter Scott, writing to a youth who had obtained a situation and asked for his advice, gave him in reply this sound counsel: "Beware of stumbling over a propensity which easily besets you from not having your time fully employed—I mean what the women call *dawdling*. Your motto must be, *Hoc age*. Do instantly whatever is to be done, and take the hours of recreation after business, never before it. When a regiment is under march, the rear is often thrown into confusion because the front do not move steadily and without interruption. It is the same with business. If that which is first in hand is not instantly, steadily, and regularly despatched, other things accumulate behind, till affairs begin to press all at once, and no human brain can stand the confusion."

Promptitude in action may be stimulated by a due consideration of the value of time. An Italian philosopher was accustomed to call time his estate: an estate which produces nothing of value without cultivation, but, duly improved, never fails to recompense the labours of the diligent worker. Allowed to lie waste, the product will be only noxious weeds and vicious growths of all kinds. One of the minor uses of steady employment is, that it keeps one out of mischief, for truly an idle brain is the devil's workshop, and a lazy man the devil's bolster. To be occupied is to be possessed as by a tenant, whereas to be idle is to be empty; and when the doors of the imagination are opened, temptation finds a ready access, and evil thoughts come trooping in. It is observed at sea, that men are never so much disposed to grumble and mutiny as when least employed. Hence an old captain, when there was nothing else to do, would issue the order to "scour the anchor!"

Men of business are accustomed to quote the maxim that 'Time is money, but it is much more; the proper improvement of it is self-culture, self-improvement, and growth of character. An hour wasted daily on trifles or in indolence, would, if devoted to self-improvement, make an

ignorant man wise in a few years, and, employed in good works, would make his life fruitful, and death a harvest of worthy deeds. Fifteen minutes a day devoted to self-improvement, will be felt at the end of the year. Good thoughts and carefully gathered experience take up no room, and are carried about with us as companions everywhere, without cost or incumbrance. An economical use of time is the true mode of securing leisure: it enables us to get through business and carry it forward, instead of being driven by it. On the other hand, the miscalculation of time involves us in perpetual hurry, confusion, and difficulties; and life becomes a mere shuffle of expedients, usually followed by disaster. Nelson once said, "I owe all my success in life to having been always a quarter of an hour before my time."

Some take no thought of the value of money until they have come to an end of it, and many do the same with their time. The hours are allowed to flow by unemployed, and then, when life is fast waning, they bethink themselves of the duty of making a wiser use of it. But the habit of listlessness and idleness may already have become confirmed, and they are unable to break the bonds with which they have permitted themselves to become bound. Lost wealth may be replaced by industry, lost knowledge by study, lost health by temperance or medicine, but lost time is gone for ever.

A proper consideration of the value of time, will also inspire habits of punctuality. "Punctuality," said Louis XIV., "is the politeness of kings." It is also the duty of gentlemen, and the necessity of men of business. Nothing begets confidence in a man sooner than the practice of this virtue, and nothing shakes confidence sooner than the want of it. He who holds to his appointment and does not keep you waiting for him, shows that he has regard for your time as well as for his own. Thus punctuality is one of the modes by which we testify our personal respect for those whom we are called upon to meet in the business of

life. It is also conscientiousness in a measure ; for an appointment is a contract, express or implied, and he who does not keep it breaks faith, as well as dishonestly uses other people's time, and thus inevitably loses character. We naturally come to the conclusion that the person who is careless about time will be careless about business, and that he is not the one to be trusted with the transaction of matters of importance. When Washington's secretary excused himself for the lateness of his attendance and laid the blame upon his watch, his master quietly said, "Then you must get another watch, or I another secretary."

The unpunctual man is a general disturber of others' peace and serenity. Everybody with whom he has to do is thrown from time to time into a state of fever ; he is systematically late : regular only in his irregularity. He conducts his dawdling as if upon a system ; always arrives at his appointment after time ; gets to the railway station after the train has started ; and posts his letter when the box has closed. Business is thus thrown into confusion, and everybody concerned is put out of temper. It will generally be found that the men who are thus habitually behind time are as habitually behind success ; and the world generally casts them aside to swell the ranks of the grumblers and the railers against fortune. The late Mr. Tegg, the publisher, who rose from a very humble position in life, once said of himself, that he "had lodged with beggars, and had the honour of presentation to royalty," and that he attributed his success in life mainly to three things—punctuality as to time, self-reliance, and integrity in word and deed.

It is astonishing how much an energetic man of business can accomplish by methodical working, and by the careful economy of his time. It would even appear as if, the more business he had, the more leisure he had for other affairs. It is said of Lord Brougham, that when he was in the full career of his profession, presiding in the House of Lords

and the Court of Chancery, he found time to be at the head of some eight or ten public associations—one of which was the Society for the Diffusion of Useful Knowledge—and that he was most punctual in his attendances, always contriving to be in the chair when the hour of meeting had arrived.

In addition to these ordinary working qualities, the business man of the highest class requires sound discretion, quick perception, and firmness in the execution of his plans. Business tact is also important; and though this is partly the gift of nature, it is yet capable of being cultivated and developed by observation and experience. Men of this quality are quick to see the right mode of action, and if they have decision of purpose, are prompt to carry out their undertakings to a successful issue. Such men give a new life to industry; they put their character into every work that they enter upon, and are among the most powerful agents in the progress of society in all times.

It will be observed from what we have said that the successful conduct of business consists in a great measure in assiduous attention to matters of detail, in short, to what is ordinarily called Routine, and sometimes Red-Tapeism. Accuracy, discipline, punctuality, method, payment of debts, organization, all are routine. No doubt a blind, stupid routine causes hindrance to business, but a wise routine greatly facilitates it, whilst it is the only check to rashness and incapacity on the part of individuals, where the business of large departments has to be conducted. In the case of a business in the hands of a single person, such as that of a merchant or manufacturer, there will be greater promptitude in action, and less need for the interposition of checks, because no one has to be consulted but the master himself; and he is stimulated by self-interest to watch closely all the outgoings and incomings of his concern. But where self-interest is less active, and where a large business, as of a corporation or a Government, is managed by *employés*, routine necessarily becomes com-

plicated by checks; for, though the large majority of men are honest, it is absolutely necessary that provision should be made against the possible rogue or the jobber.

The late Duke of Wellington was a great routinist, because he was a first-rate man of business. He possessed in perfection all the qualities which constitute one. He was a most punctual man; he never received a letter without acknowledging or replying to it; and he habitually attended to the minutest details of all matters entrusted to him, whether civil or military. His business faculty was his genius, the genius of common sense; and it is not perhaps saying too much to aver, that it was because he was a first-rate man of business that he never lost a battle.

While a subaltern officer, he became dissatisfied with the slowness of his promotion, and having passed from the infantry to the cavalry twice, and back again, without advancement, he applied to Lord Camden, then Viceroy of Ireland, for employment in the Revenue or Treasury Board. Had he succeeded, no doubt he would have made a first-rate head of a department, as he would have made a first-rate merchant or manufacturer. But his application failed, and he remained with the army to become one of the very greatest of British generals.

The Duke began his active military career under the Duke of York and General Walmoden, in Flanders and Holland, where he learnt, amidst misfortunes and defeats, how bad business arrangements and bad generalship serve to ruin the *morale* of an army. Ten years after entering the army we find him a colonel in India, reported by his superiors as an officer of indefatigable energy and application. He entered into the minutest details of the service, and sought to raise the discipline of his men to the highest standard. "The regiment of Colonel Wellesley," wrote General Harris in 1799, "is a model regiment; on the score of soldierly bearing, discipline, instruction, and orderly behaviour it is above all praise." Thus qualifying himself for posts of greater confidence, he was shortly

after nominated governor of the capital of Mysore. In the war with the Mahrattas he was first called upon to try his hand at generalship; and at thirty-four he won the memorable battle of Assaye, with an army composed of 1500 British and 5000 sepoy, over 20,000 Mahratta infantry and 30,000 cavalry. But so brilliant a victory did not in the least disturb his equanimity, or affect the perfect honesty of his character.

Shortly after this event the opportunity occurred for exhibiting his admirable practical qualities as an administrator. Placed in command of an important district immediately after the capture of Seringapatam, his first object was to establish rigid order and discipline among his own men. Flushed with victory, the troops were found riotous and disorderly. "Send me the provost marshal," said he, "and put him under my orders: till some of the marauders are hung, it is impossible to expect order or safety." This rigid severity of Wellington in the field, though it was the dread, proved the salvation of his troops in many campaigns. His next step was to re-establish the markets and re-open the sources of supply. General Harris wrote to the Governor-general, strongly commending Colonel Wellesley for the perfect discipline he had established, and for his "judicious and masterly arrangements in respect to supplies, which opened an abundant free market, and inspired confidence into dealers of every description." The same close attention to, and mastery of details, characterized him throughout his Indian career; and it is remarkable that one of his very ablest despatches to Lord Clive, full of practical information as to the conduct of the campaign, was written whilst the column he commanded was crossing the Toombuddra, in the face of the vastly superior army of Doondiah, posted on the opposite bank, and when a thousand matters of the deepest interest were pressing upon the commander's mind. But it was one of his most remarkable characteristics, thus to be able to withdraw himself temporarily from the business immediately in

hand, and to bend his full powers upon the consideration of matters totally distinct; even the most difficult circumstances on such occasions failing to embarrass or intimidate him.

Returned to England with a reputation for generalship, Sir Arthur Wellesley met with immediate employment. In 1808 a corps of 10,000 men destined to liberate Portugal was placed under his charge. He landed, fought, and won two battles, and signed the Convention of Cintra. After the death of Sir John Moore he was entrusted with the command of a new expedition to Portugal. Wellington was fearfully overmatched throughout these Peninsular campaigns. From 1809 to 1813 he never had more than 30,000 British troops under his command, at a time when there stood opposed to him in the Peninsula some 350,000 French, mostly veterans, led by some of Napoleon's ablest generals. How was he to contend against such immense forces with any fair prospect of success? His clear discernment and strong common sense soon taught him that he must adopt a different policy from that of the Spanish generals, who were invariably beaten and dispersed whenever they ventured to offer battle in the open plains. He perceived he had yet to create the army that was to contend against the French with any reasonable chance of success. Accordingly, after the battle of Talavera in 1809, when he found himself encompassed on all sides by superior forces of French, he retired into Portugal, there to carry out the settled policy on which he had by this time determined. It was, to organise a Portuguese army under British officers, and teach them to act in combination with his own troops, in the mean time avoiding the peril of a defeat by declining all engagements. He would thus, he conceived, destroy the *morale* of the French, who could not exist without victories; and when his army was ripe for action, and the enemy demoralized, he would then fall upon them with all his might.

The extraordinary qualities displayed by Lord Wellington

throughout these immortal campaigns, can only be appreciated after a perusal of his despatches, which contain the unvarnished tale of the manifold ways and means by which he laid the foundations of his success. Never was man more tried by difficulty and opposition, arising not less from the imbecility, falsehood, and intrigues of the British Government of the day, than from the selfishness, cowardice, and vanity of the people he went to save. It may, indeed, be said of him, that he sustained the war in Spain by his individual firmness and self-reliance, which never failed him even in the midst of his greatest discouragements. He had not only to fight Napoleon's veterans, but also to hold in check the Spanish juntas and the Portuguese regency. He had the utmost difficulty in obtaining provisions and clothing for his troops; and it will scarcely be credited that, while engaged with the enemy in the battle of Talavera, the Spaniards, who ran away, fell upon the baggage of the British army, and the ruffians actually plundered it! These and other vexations the Duke bore with a sublime patience and self-control, and held on his course, in the face of ingratitude, treachery, and opposition, with indomitable firmness. He neglected nothing, and attended to every important detail of business himself. When he found that food for his troops was not to be obtained from England, and that he must rely upon his own resources for feeding them, he forthwith commenced business as a corn merchant on a large scale, in copartnership with the British Minister at Lisbon. Commissariat bills were created, with which grain was bought in the ports of the Mediterranean and in South America. When he had thus filled his magazines, the overplus was sold to the Portuguese, who were greatly in want of provisions. He left nothing whatever to chance, but provided for every contingency. He gave his attention to the minutest details of the service; and was accustomed to concentrate his whole energies, from time to time, on such apparently ignominious matters as soldiers' shoes, camp-kettles, biscuits,

and horse fodder. His magnificent business qualities were everywhere felt; and there can be no doubt that, by the care with which he provided for every contingency, and the personal attention which he gave to every detail, he laid the foundations of his great success.* By such means he transformed an army of raw levies into the best soldiers in Europe, with whom he declared it to be possible to go anywhere and do anything.

We have already referred to his remarkable power of abstracting himself from the work, no matter how engrossing, immediately in hand, and concentrating his energies upon the details of some entirely different business. Thus Napier relates that it was while he was preparing to fight the battle of Salamanca that he had to expose to the Ministers at home the futility of relying upon a loan; it was on the heights of San Christoval, on the field of battle itself, that he demonstrated the absurdity of attempting to establish a Portuguese bank; it was in the trenches of Burgos that he dissected Funchal's scheme of finance, and exposed the folly of attempting the sale of church property; and on each occasion, he showed himself as well acquainted with these subjects as with the minutest detail in the mechanism of armies.

Another feature in his character, showing the upright man of business, was his thorough honesty. Whilst Soult ransacked and carried away with him from Spain numerous pictures of great value, Wellington did not appropriate to himself a single farthing's worth of property. Everywhere he paid his way, even when in the enemy's country. When he had crossed the French frontier, followed by 40,000 Spaniards, who sought to "make fortunes" by pillage and plunder, he first rebuked their officers, and then, finding his efforts to restrain them unavailing, he

* The recently published correspondence of Napoleon with his brother Joseph, and the Memoirs of the Duke of Ragusa, abundantly confirm this view. The Duke overthrew Napoleon by the superiority of his routine. He used to say that, if he knew anything at all, he knew how to feed an army.

sent them back into their own country. It is a remarkable fact, that, even in France, the peasantry fled from their own countrymen, and carried their valuables within the protection of the British lines! At the very same time, Wellington was writing home to the British Ministry, "We are overwhelmed with debts, and I can scarcely stir out of my house on account of public creditors waiting to demand payment of what is due to them." Jules Maurel, in his estimate of the Duke's character, says, "Nothing can be grander or more nobly original than this admission. This old soldier, after thirty years' service, this iron man and victorious general, established in an enemy's country at the head of an immense army, is afraid of his creditors! This is a kind of fear that has seldom troubled the mind of conquerors and invaders; and I doubt if the annals of war could present anything comparable to this sublime simplicity." But the Duke himself, had the matter been put to him, would most probably have disclaimed any intention of acting either grandly or nobly in the matter; merely regarding the punctual payment of his debts as the best and most honourable mode of conducting his business.

The truth of the good old maxim, that "Honesty is the best policy," is upheld by the daily experience of life; uprightness and integrity being found as successful in business as in everything else. As Hugh Miller's worthy uncle used to advise him, "In all your dealings give your neighbour the cast of the baulk—'good measure, heaped up, and running over,'—and you will not lose by it in the end." A well-known brewer of beer attributed his success to the liberality with which he used his malt. Going up to the vat and tasting it, he would say, "Still rather poor, my lads; give it another cast of the malt." The brewer put his character into his beer, and it proved generous accordingly, obtaining a reputation in England, India, and the colonies, which laid the foundation of a large fortune. Integrity of word and deed ought to be the very cornerstone of all business transactions. To the tradesman, the

merchant, and manufacturer, it should be what honour is to the soldier, and charity to the Christian. In the humblest calling there will always be found scope for the exercise of this uprightness of character. Hugh Miller speaks of the mason with whom he served his apprenticeship, as one who "*put his conscience into every stone that he laid.*" So the true mechanic will pride himself upon the thoroughness and solidity of his work, and the high-minded contractor upon the honesty of performance of his contract in every particular. The upright manufacturer will find not only honour and reputation, but substantial success, in the genuineness of the article which he produces, and the merchant in the honesty of what he sells, and that it really is what it seems to be. Baron Dupin, speaking of the general probity of Englishmen, which he held to be a principal cause of their success, observed, "We may succeed for a time by fraud, by surprise, by violence; but we can succeed permanently only by means directly opposite. It is not alone the courage, the intelligence, the activity, of the merchant and manufacturer which maintain the superiority of their productions and the character of their country; it is far more their wisdom, their economy, and, above all, their probity. If ever in the British Islands the useful citizen should lose these virtues, we may be sure that, for England, as for every other country, the vessels of a degenerate commerce, repulsed from every shore, would speedily disappear from those seas whose surface they now cover with the treasures of the universe, bartered for the treasures of the industry of the three kingdoms."

It must be admitted, that Trade tries character perhaps more severely than any other pursuit in life. It puts to the severest tests honesty, self-denial, justice, and truthfulness; and men of business who pass through such trials unstained are perhaps worthy of as great honour as soldiers who prove their courage amidst the fire and perils of battle. And, to the credit of the multitudes of men

engaged in the various departments of trade, we think it must be admitted that on the whole they pass through their trials nobly. If we reflect but for a moment on the vast amount of wealth daily entrusted even to subordinate persons, who themselves probably earn but a bare competency—the loose cash which is constantly passing through the hands of shopmen, agents, brokers, and clerks in banking houses,—and note how comparatively few are the breaches of trust which occur amidst all this temptation, it will probably be admitted that this steady daily honesty of conduct is most honourable to human nature, if it do not even tempt us to be proud of it. The same trust and confidence reposed by men of business in each other, as implied by the system of Credit, which is mainly based upon the principle of honour, would be surprising if it were not so much a matter of ordinary practice in business transactions. Dr. Chalmers has well said, that the implicit trust with which merchants are accustomed to confide in distant agents, separated from them perhaps by half the globe—often consigning vast wealth to persons, recommended only by their character, whom perhaps they never saw—is probably the finest act of homage which men can render to one another.

Although common honesty is still happily in the ascendant amongst common people, and the general business community of England is still sound at heart, putting their honest character into their respective callings,—there are unhappily, as there have been in all times, but too many instances of flagrant dishonesty and fraud, exhibited by the unscrupulous, the over-speculative, and the intensely selfish, in their haste to be rich. There are tradesmen who adulterate, contractors who “scamp,” manufacturers who give us shoddy instead of wool, “dressing” instead of cotton, cast-iron tools instead of steel, needles without eyes, razors made only “to sell,” and swindled fabrics in many shapes. But these we must hold to be the exceptional cases, of low minded and grasping men, who, though they

may gain wealth which they probably cannot enjoy, will never gain an honest character, nor secure that without which wealth is nothing—a satisfied conscience. “The rogue cozened not me, but his own conscience,” said Bishop Latimer of a cutler who made him pay twopence for a knife not worth a penny. Money, earned by screwing, cheating, and overreaching, may for a time dazzle the eyes of the unthinking; but the bubbles blown by unscrupulous rogues, when full-blown, usually glitter only to burst. The Sadleirs, Dean Pauls, and Redpaths, for the most part, come to a sad end even in this world; and though the successful swindles of others may not be “found out,” and the gains of their roguery may remain with them, it will be as a curse and not as a blessing.

It is possible that the scrupulously honest man may not grow rich so fast as the unscrupulous and dishonest one; but the success will be of a truer kind, earned without fraud or injustice. And even though a man should for a time be unsuccessful, still he must be honest: better lose all and save character. For character is itself a fortune; and if the high-principled man will but hold on his way courageously, success will surely come,—nor will the highest reward of all be withheld from him. Wordsworth well describes the “Happy Warrior,” as he

“Who comprehends his trust, and to the same
Keeps faithful with a singleness of aim;
And therefore does not stoop, nor lie in wait
For wealth, or honour, or for worldly state;
Whom they must follow, on whose head must fall,
Like showers of manna, if they come at all.”

As an example of the high-minded mercantile man trained in upright habits of business, and distinguished for justice, truthfulness, and honesty of dealing in all things, the career of the well-known David Barclay, grandson of Robert Barclay, of Ury, the author of the celebrated ‘Apology for the Quakers,’ may be briefly referred to. For many years he was the head of an extensive house in Cheapside, chiefly engaged in the American trade; but

like Granville Sharp, he entertained so strong an opinion against the war with our American colonies, that he determined to retire altogether from the trade. Whilst a merchant, he was as much distinguished for his talents, knowledge, integrity, and power, as he afterwards was for his patriotism and munificent philanthropy. - He was a mirror of truthfulness and honesty; and, as became the good Christian and true gentleman, his word was always held to be as good as his bond. His position, and his high character, induced the Ministers of the day on many occasions to seek his advice; and, when examined before the House of Commons on the subject of the American dispute, his views were so clearly expressed, and his advice was so strongly justified by the reasons stated by him, that Lord North publicly acknowledged that he had derived more information from David Barclay than from all others east of Temple Bar. On retiring from business, it was not to rest in luxurious ease, but to enter upon new labours of usefulness for others. With ample means, he felt that he still owed to society the duty of a great example. He founded a house of industry near his residence at Walthamstow, which he supported at a large cost for several years, until at length he succeeded in rendering it a source of comfort as well as independence to the well-disposed families of the poor in that neighbourhood. When an estate in Jamaica fell to him, he determined, though at a cost of some 10,000*l.*, at once to give liberty to the whole of the slaves on the property. He sent out an agent, who hired a ship, and he had the little slave community transported to one of the free American states, where they settled down and prospered. Mr. Barclay had been assured that the negroes were too ignorant and too barbarous for freedom, and it was thus that he determined practically to demonstrate the fallacy of the assertion. In dealing with his accumulated savings, he made himself the executor of his own will, and instead of leaving a large fortune to be divided among his relatives at his death, he extended to

them his munificent aid during his life, watched and aided them in their respective careers, and thus not only laid the foundation, but lived to see the maturity, of some of the largest and most prosperous business concerns in the metropolis. We believe that to this day some of our most eminent merchants—such as the Gurneys, Hanburys, and Buxtons—are proud to acknowledge with gratitude the obligations they owe to David Barclay for the means of their first introduction to life, and for the benefits of his counsel and countenance in the early stages of their career. Such a man stands as a mark of the mercantile honesty and integrity of his country, and is a model and example for men of business in all time to come.

CHAPTER IX.

MONEY—USE AND ABUSE.

“Not for to hide it in a hedge,
Nor for a train attendant,
But for the glorious privilege
Of being independent.”—*Burns*.

“Neither a borrower nor a lender be;
For loan oft loses both itself and friend;
And borrowing dulls the edge of husbandry.”—*Shakespeare*.

How a man uses money—makes it, saves it, and spends it—is perhaps one of the best tests of his practical wisdom. Although money ought by no means to be regarded as the chief end of man's life, neither is it a trifling matter, to be held in philosophic contempt, representing as it does to so large an extent, the means of physical comfort and social well-being. Indeed, some of the finest qualities of human nature are intimately related to the right use of money, such as generosity, honesty, justice, and self-sacrifice; as well as the practical virtues of economy and providence. On the other hand, there are their counterparts of avarice, fraud, injustice, and selfishness, as displayed by inordinate lovers of gain; and the vices of thriftlessness, extravagance, and improvidence, on the part of those who misuse and abuse the means entrusted to them. “So that,” as is wisely observed by Henry Taylor in his thoughtful ‘Notes from Life,’ “a right measure and manner in getting, saving, spending, giving, taking, lending, borrowing, and bequeathing, would almost argue a perfect man.”

Comfort in worldly circumstances is a condition which

every man is justified in striving to attain by all worthy means. It secures that physical satisfaction, which is necessary for the culture of the better part of his nature; and enables him to provide for those of his own household, without which, says the Apostle, a man is "worse than an infidel." Nor ought the duty to be any the less indifferent to us, that the respect which our fellow-men entertain for us in no slight degree depends upon the manner in which we exercise the opportunities which present themselves for our honourable advancement in life. The very effort required to be made to succeed in life with this object, is of itself an education; stimulating a man's sense of self-respect, bringing out his practical qualities, and disciplining him in the exercise of patience, perseverance, and such like virtues. The provident and careful man must necessarily be a thoughtful man, for he lives not merely for the present, but with provident forecast makes arrangements for the future. He must also be a temperate man, and exercise the virtue of self-denial, than which nothing is so much calculated to give strength to the character. John Sterling says truly, that "the worst education which teaches self-denial, is better than the best which teaches everything else, and not that." The Romans rightly employed the same word (*virtus*) to designate courage, which is in a physical sense what the other is in a moral; the highest virtue of all being victory over ourselves.

What is the quality in which the improvident classes of this country are so deficient as self-denial—the ability to sacrifice a small present gratification for a future good? Those classes who work the hardest might naturally be expected to value the most the money which they earn. Yet the readiness with which so many are accustomed to eat up and drink up their earnings as they go, renders them to a great extent absolutely helpless and dependent upon the frugal. There are large numbers of men among us, who, though enjoying sufficient means of comfort and independence, are often found to be barely a day's march

ahead of actual want when a time of pressure occurs ; and hence a great cause of social helplessness and suffering. On one occasion a deputation waited on Lord John Russell, respecting the taxation levied on the working classes of the country, when the noble lord took the opportunity of remarking, “ You may rely upon it that the Government of this country durst not tax the working classes to anything like the extent to which they tax themselves in their expenditure upon intoxicating drinks alone ! ” *

Of all great public questions, there is none more important than this,—no great work of reform calling more loudly for labourers. But it must be admitted that “ self-denial and self-help ” would make a poor rallying cry for the hustings ; and it is to be feared that the patriotism of this day has but little regard for such common things as individual economy and providence, although it is by the practice of such virtues only that the genuine independence of the industrial classes is to be secured. “ Prudence, frugality, and good management,” said Samuel Drew, the philosophical shoemaker, “ are excellent artists for mending bad times : they occupy but little room in any dwelling, but would furnish a more effectual remedy for the evils of life than any Reform Bill that ever passed the Houses of Parliament.” Socrates said, “ Let him that would move the world move first himself.” Or, as the old rhyme runs—

“ If every one would see
To his own reformation,
How very easily
You might reform a nation.”

It is, however, generally felt to be a far easier thing to reform the constitution in Church and State than to reform

* The whole expenses of conducting the government of Great Britain at home and abroad, for the year ending the 31st March, 1859, including the excessive cost of the army and navy in that year, the courts of justice, and all the public departments of state (exclusive only of the interest on the national debt) amounted to 34,136,399*l.*; whereas it is computed by Mr. Porter that we expend annually upwards of forty-eight millions sterling on intoxicating drinks and tobacco, the principal part of which is borne by the working classes.

the least of our own bad habits; and in such matters it is usually found more agreeable to our tastes, as it certainly is the common practice, to begin with our neighbours rather than with ourselves.

Any class of men that lives from hand to mouth will ever be an inferior class. They will necessarily remain impotent and helpless, hanging on to the skirts of society, the sport of times and seasons. Having no respect for themselves, they will fail in securing the respect of others. In commercial crises, such men must inevitably go to the wall. Wanting that husbanded power which a store of savings, no matter how small, invariably gives them, they will be at every man's mercy, and, if possessed of right feelings, they cannot but regard with fear and trembling the future possible fate of their wives and children. "The world," once said Mr. Cobden to the working men of Huddersfield, "has always been divided into two classes,—those who have saved, and those who have spent—the thrifty and the extravagant. The building of all the houses, the mills, the bridges, and the ships, and the accomplishment of all other great works which have rendered man civilized and happy, has been done by the savers, the thrifty; and those who have wasted their resources have always been their slaves. It has been the law of nature and of Providence that this should be so; and I were an impostor if I promised any class that they would advance themselves if they were improvident, thoughtless, and idle."

Equally sound was the advice given by Mr. Bright to an assembly of working men at Rochdale, in 1847, when, after expressing his belief that, "so far as honesty was concerned, it was to be found in pretty equal amount among all classes," he used the following words:—"There is only one way that is safe for any man, or any number of men, by which they can maintain their present position if it be a good one, or raise themselves above it if it be a bad one,—that is, by the practice of the virtues of industry, frugality, temperance, and honesty. There is no royal

road by which men can raise themselves from a position which they feel to be uncomfortable and unsatisfactory, as regards their mental or physical condition, except by the practice of those virtues by which they find numbers amongst them are continually advancing and bettering themselves. What is it that has made, that has in fact created, the middle class in this country, but the virtues to which I have alluded? There was a time when there was hardly any class in England, except the highest, that was equal in condition to the poorest class at this moment. How is it that the hundreds of thousands of men now existing in this our country of the middle class, are educated, comfortable, and enjoying an amount of happiness and independence, to which our forefathers were wholly unaccustomed? Why, by the practice of those very virtues; for I maintain that there has never been in any former age as much of these virtues as is now to be found amongst the great middle class of our community. When I speak of the middle class, I mean that class which is between the privileged class, the richest, and the very poorest in the community; and I would recommend every man to pay no attention whatever to public writers or speakers, whoever they may be, who tell them that this class or that class, that this law or that law, that this Government or that Government, can do all these things for them. I assure you, after long reflection and much observation, that there is no way for the working classes of this country to improve their condition but that which so many of them have already availed themselves of,—that is, by the practice of those virtues, and by reliance upon themselves.”

There is no reason why the condition of the average workman in this country should not be a useful, honourable, respectable, and happy one. The whole body of the working classes might (with few exceptions) be as frugal, virtuous, well-informed, and well-conditioned as many individuals of the same class have already made themselves

What some men are, all without difficulty might be. Employ the same means, and the same results will follow. That there should be a class of men who live by their daily labour in every state is the ordinance of God, and doubtless is a wise and righteous one; but that this class should be otherwise than frugal, contented, intelligent, and happy, is not the design of Providence, but springs solely from the weakness, self-indulgence, and perverseness of man himself. The healthy spirit of self-help created amongst working people would more than any other measure serve to raise them as a class, and this, not by pulling down others, but by levelling them up to a higher and still advancing standard of religion, intelligence, and virtue. "All moral philosophy," says Montaigne, "is as applicable to a common and private life as to the most splendid. Every man carries the entire form of the human condition within him."

Economising one's means with the mere object of hoarding is a very mean thing; but economising for the purpose of being independent is one of the soundest indications of manly character; and when practised with the object of providing for those who are dependent upon us, it assumes quite a noble aspect. It is the exhibition of self-help in one of its best forms. Francis Horner's father gave him this good advice on first entering life:—"Whilst I wish you to be comfortable in every respect, I cannot too strongly inculcate economy. It is a necessary virtue to all; and however the shallow part of mankind may despise it, it certainly leads to independence, which is a grand object to every man of a high spirit." Burns' lines, above quoted, contain the right idea; but unhappily his strain of song was higher than his practice; his ideal better than his habit. When laid upon his death-bed he wrote to a friend, "Alas! Clarke, I begin to feel the worst. Burns' poor widow, and half a dozen of his dear little ones helpless orphans;—there I am weak as a woman's tear. Enough of this;—'tis half my disease."

Every man ought so to contrive as to live within his means. This practice is of the very essence of honesty. For if a man do not manage honestly to live within his own means, he must necessarily be living dishonestly upon the means of somebody else. Those who are careless about personal expenditure, and consider merely their own gratification, without regard for the comfort of others, generally find out the real uses of money when it is too late. Though by nature generous, these thriftless persons are often driven in the end to do very shabby things. They dawdle with their money as with their time; draw bills upon the future; anticipate their earnings; and are thus under the necessity of dragging after them a load of debts and obligations which seriously affect their action as free and independent men. The loose cash which many persons throw away uselessly, and worse, would often form a basis of fortune and independence for life. These wasters are their own worst enemies, though generally found amongst the ranks of those who rail at the injustice of "the world." But if a man will not be his own friend, how can he expect that others will? Orderly men of moderate means have always something left in their pockets to help others; whereas your prodigal and careless fellows who spend all never find an opportunity for helping anybody. It is poor economy, however, to be a scrub. Narrowmindedness in living and in dealing is generally short-sighted, and leads to failure. The penny soul, it is said, never came to two-pence. Generosity and liberality, like honesty, prove the best policy after all. Though Jenkinson, in the 'Vicar of Wakefield,' cheated his kind-hearted neighbour Flamborough in one way or another every year, "Flamborough," he says, "has been regularly growing in riches, while I have come to poverty and a gaol." And practical life abounds in cases of brilliant results from a course of generous and honest policy.

The proverb says that "an empty bag cannot stand upright;" neither can a man who is in debt. Debt makes

everything a temptation. It lowers a man in self-respect, places him at the mercy of his tradesman and his servant, and renders him a slave in many respects, for he can no longer call himself his own master, nor boldly look the world in the face. It is also difficult for a man who is in debt to be truthful; hence it is said that lying rides on debt's back. The debtor has to frame excuses to his creditor for postponing payment of the money he owes him; and probably also to contrive falsehoods. It is easy enough for a man who will exercise a healthy resolution, to avoid incurring the first obligation; but the facility with which that has been incurred often becomes a temptation to a second; and very soon the unfortunate borrower becomes so entangled that no late exertion of industry can set him free. The first step in debt is like the first step in falsehood; almost involving the necessity of proceeding in the same course, debt following debt, as lie follows lie. Haydon, the painter, dated his decline from the day on which he first borrowed money. He realized the truth of the proverb, "Who goes a-borrowing, goes a-sorrowing." The significant entry in his diary is: "Here began debt and obligation, out of which I have never been and never shall be extricated as long as I live." His Autobiography shows but too painfully how embarrassment in money matters produces poignant distress of mind, utter incapacity for work, and constantly recurring humiliations. The written advice which he gave to a youth when entering the navy was as follows: "Never purchase any enjoyment if it cannot be procured without borrowing of others. Never borrow money: it is degrading. I do not say never lend, but never lend if by lending you render yourself unable to pay what you owe; but under any circumstances never borrow." Fichte, the poor student, refused to accept even presents from his still poorer parents.

Dr. Johnson held that early debt is ruin. His words on the subject are weighty, and worthy of being held in remembrance. "Do not," said he, "accustom yourself to

consider debt only as an inconvenience ; you will find it a calamity. Poverty takes away so many means of doing good, and produces so much inability to resist evil, both natural and moral, that it is by all virtuous means to be avoided. . . . Let it be your first care, then, not to be in any man's debt. Resolve not to be poor ; whatever you have, spend less. Poverty is a great enemy to human happiness ; it certainly destroys liberty, and it makes some virtues impracticable and others extremely difficult. Frugality is not only the basis of quiet, but of beneficence. No man can help others that wants help himself ; we must have enough before we have to spare."

It is the bounden duty of every man to look his affairs in the face, and to keep an account of his incomings and outgoings in money matters. The exercise of a little simple arithmetic in this way will be found of great value. Prudence requires that we shall pitch our scale of living a degree below our means, rather than up to them ; but this can only be done by carrying out faithfully a plan of living by which both ends may be made to meet. John Locke strongly advised this course : "Nothing," said he, "is likelier to keep a man within compass than having constantly before his eyes the state of his affairs in a regular course of account." The Duke of Wellington kept an accurate detailed account of all the monies received and expended by him. "I make a point," said he to Mr. Gleig, "of paying my own bills, and I advise every one to do the same ; formerly I used to trust a confidential servant to pay them, but I was cured of that folly by receiving one morning, to my great surprise, duns of a year or two's standing. The fellow had speculated with my money, and left my bills unpaid." Talking of debt, his remark was, "It makes a slave of a man. I have often known what it was to be in want of money, but I never got into debt." Washington was as particular as Wellington was, in matters of business detail ; and it is a remarkable fact, that he did not disdain to scrutinize the smallest outgoings of his

household—determined as he was to live honestly within his means—even while holding the high office of President of the American Union.

Admiral Jervis, Earl St. Vincent, has told the story of his early struggles, and, amongst other things, of his determination to keep out of debt. “My father had a very large family,” said he, “with limited means. He gave me twenty pounds at starting, and that was all he ever gave me. After I had been a considerable time at the station [at sea], I drew for twenty more, but the bill came back protested. I was mortified at this rebuke, and made a promise, which I have ever kept, that I would never draw another bill without a certainty of its being paid. I immediately changed my mode of living, quitted my mess, lived alone, and took up the ship’s allowance, which I found quite sufficient; washed and mended my own clothes; made a pair of trousers out of the ticking of my bed; and having by these means saved as much money as would redeem my honour, I took up my bill; and from that time to this I have taken care to keep within my means.” Jervis for six years endured pinching privation, but preserved his integrity, studied his profession with success, and gradually and steadily rose by merit and bravery to the highest rank. Samuel Drew’s first lesson in economy is thus described by himself: “When I was a boy, I somehow got a few pence, and coming into St. Austell on a fair day, laid out all on a purse. My empty purse often reminded me of my folly; and the recollection has since been as useful to me as Franklin’s whistle was to him.”

It is a great point for young men to begin well; for it is in the beginning of life that that system of conduct is adopted, which soon assumes the force of Habit. Begin well, and the habit of doing well will become quite as easy as the habit of doing badly. Well-begun is half ended, says the proverb; and a good beginning is half the battle. Many promising young men have irretrievably injured themselves by a first false step at the commencement of

life; while others, of much less promising talents, have succeeded simply by beginning well, and going onward. The good practical beginning is, to a certain extent, a pledge, a promise, and an assurance, of the ultimate prosperous issue. There is many a poor creature, now crawling through life, miserable himself and the cause of sorrow to others, who might have lifted up his head and prospered, if, instead of merely satisfying himself with resolutions of well-doing, he had actually gone to work and made a good practical beginning.

Too many are, however, impatient of results. They are not satisfied to begin where their fathers did, but where they left off. They think to enjoy the fruits of industry without working for them. They cannot wait for the results of labour and application, but forestall them by too early indulgence. A worthy Scotch couple, when asked how their son had broken down so early in life, gave the following explanation: "When we began life together, we worked hard, and lived upon porridge and such like, gradually adding to our comforts as our means improved, until we were able at length to dine off a bit of roast meat and sometimes a boilt chuckie (or fowl); but as for Jock, our son, he began where we had left off—he began wi' the chuckie first." The same illustration will apply to higher conditions of life than that of this humble pair.

Mr. Hume hit the mark when he once stated in the House of Commons—though his words were followed by "laughter"—that the tone of living in England is altogether too high. Middle-class people are too apt to live up to their incomes, if not beyond them: affecting a degree of "style" which is most unhealthy in its effect upon society at large. There is an ambition to bring up boys as gentlemen, or rather "genteel" men; though the result frequently is, only to make them gents. They acquire a taste for dress, style, luxuries, and amusements, which can never form any solid foundation for manly or gentlemanly character; and the result is, that we have a vast number of gingerbread

young gentry thrown upon the world, who remind one of the abandoned hulls sometimes picked up at sea, with only a monkey on board.

There is a dreadful ambition abroad for being "genteel." We keep up appearances, too often at the expense of honesty; and, though we may not be rich, yet we must seem to be so. We must be "respectable," though only in the meanest sense—in mere vulgar outward show. We have not the courage to go patiently onward in the condition of life in which it has pleased God to call us; but must needs live in some fashionable state to which we ridiculously please to call ourselves, and all to gratify the vanity of that unsubstantial genteel world of which we form a part. There is a constant struggle and pressure for front seats in the social amphitheatre; in the midst of which all noble self-denying resolve is trodden down, and many fine natures are inevitably crushed to death. What waste, what misery, what bankruptcy, come from all this ambition to dazzle others with the glare of apparent worldly success, we need not describe. The mischievous results show themselves in a thousand ways—in the rank frauds committed by men who dare to be dishonest, but do not dare to seem poor; and in the desperate dashes at fortune, in which the pity is not so much for those who fail, as for the hundreds of innocent families who are so often involved in their ruin.

The late Sir Charles Napier, in taking leave of his command in India, did a bold and honest thing in publishing his strong protest, embodied in his last General Order to the officers of the Indian army, against the "fast" life led by so many young officers in that service, involving them in ignominious obligations. Sir Charles strongly urged, in that famous document—what had almost been lost sight of—that "honesty is inseparable from the character of a thorough-bred gentleman;" and that "to drink unpaid-for champagne and unpaid-for beer, and to ride unpaid-for horses, is to be a cheat, and not a gentleman." Men who lived beyond

their means, and were summoned, often by their own servants, before Courts of Requests for debts contracted in extravagant living, might be officers by virtue of their commissions, but they were not gentlemen. The habit of being constantly in debt, the Commander-in-chief held, made men grow callous to the proper feelings of a gentleman. It was not enough that an officer should be able to fight: that any bull-dog could do. But did he hold his word inviolate—did he pay his debts? These were among the points of honour which, he insisted, illuminated the true gentleman's and soldier's career. As Bayard was of old, so would Sir Charles Napier have all British officers to be. He knew them to be "without fear," but he would also have them "without reproach." There are, however, many gallant young fellows, both in India and at home, capable of mounting a breach on an emergency amidst belching fire, and of performing the most desperate deeds of valour, who nevertheless cannot or will not exercise the moral courage necessary to enable them to resist a petty temptation presented to their senses. They cannot utter their valiant "No," or "I can't afford it," to the invitations of pleasure and self-enjoyment; and they are found ready to brave death rather than the ridicule of their companions.

The young man, as he passes through life, advances through a long line of tempters ranged on either side of him; and the inevitable effect of yielding, is degradation in a greater or less degree. Contact with them tends insensibly to draw away from him some portion of the divine electric element with which his nature is charged; and his only mode of resisting them is to utter and to act out his "no" manfully and resolutely. He must decide at once, not waiting to deliberate and balance reasons; for the youth, like "the woman who deliberates, is lost." Many deliberate, without deciding; but "not to resolve, is to resolve." A perfect knowledge of man is in the prayer, "Lead us not into temptation." But temptation will come to try the young man's strength; and once yielded to, the

power to resist grows weaker and weaker. Yield once, and a portion of virtue has gone. Resist manfully, and the first decision will give strength for life; repeated, it will become a habit. It is in the outworks of the habits formed in early life that the real strength of the defence must lie; for it has been wisely ordained, that the machinery of moral existence should be carried on principally through the medium of the habits, so as to save the wear and tear of the great principles within. It is good habits, which insinuate themselves into the thousand inconsiderable acts of life, that really constitute by far the greater part of man's moral conduct.

Hugh Miller has told how, by an act of youthful decision, he saved himself from one of the strong temptations so peculiar to a life of toil. When employed as a mason, it was usual for his fellow-workmen to have an occasional treat of drink, and one day two glasses of whisky fell to his share, which he swallowed. When he reached home, he found, on opening his favourite book—'Bacon's Essays'—that the letters danced before his eyes, and that he could no longer master the sense. "The condition," he says, "into which I had brought myself was, I felt, one of degradation. I had sunk, by my own act, for the time, to a lower level of intelligence than that on which it was my privilege to be placed; and though the state could have been no very favourable one for forming a resolution, I in that hour determined that I should never again sacrifice my capacity of intellectual enjoyment to a drinking usage; and, with God's help, I was enabled to hold by the determination." It is such decisions as this that often form the turning-points in a man's life, and furnish the foundation of his future character. And this rock, on which Hugh Miller might have been wrecked, if he had not at the right moment put forth his moral strength to strike away from it, is one that youth and manhood alike need to be constantly on their guard against. It is about one of the worst and most deadly, as well as extravagant, temptations which lie

in the way of youth. Sir Walter Scott used to say that "of all vices drinking is the most incompatible with greatness." Not only so, but it is incompatible with economy, decency, health, and honest living. When a youth cannot restrain, he must abstain. Dr. Johnson's case is the case of many. He said, referring to his own habits, "Sir, I can abstain; but I can't be moderate."

But to wrestle vigorously and successfully with any vicious habit, we must not merely be satisfied with contending on the low ground of worldly prudence, though that is of use, but take stand upon a higher moral elevation. Mechanical aids, such as pledges, may be of service to some, but the great thing is to set up a high standard of thinking and acting, and endeavour to strengthen and purify the principles as well as to reform the habits. For this purpose a youth must study himself, watch his steps, and compare his thoughts and acts with his rule. The more knowledge of himself he gains, the more humble will he be, and perhaps the less confident in his own strength. But the discipline will be found most valuable which is acquired by resisting small present gratifications to secure a prospective greater and higher one. It is the noblest work in self-education,—for

" Real glory
Springs from the silent conquest of ourselves,
And without that the conqueror is nought
But the first slave."

Many popular books have been written for the purpose of communicating to the public the grand secret of making money. But there is no secret whatever about it, as the proverbs of every nation abundantly testify. "Many a little makes a meikle."—"Take care of the pennies and the pounds will take care of themselves."—"A penny saved is a penny gained."—"Diligence is the mother of good luck."—"No pains no gains."—"No sweat no sweet."—"Sloth, the key of poverty."—"Work, and thou shalt have."—"He who will not work, neither shall he eat."—

“The world is his, who has patience and industry.”—“It is too late to spare when all is spent.”—“Better go to bed supperless than rise in debt.”—“The morning hour has gold in its mouth.”—“Credit keeps the crown of the causeway.” Such are specimens of the proverbial philosophy, embodying the hoarded experience of many generations, as to the best means of thriving in the world. They were current in people’s mouths long before books were invented; and like other popular proverbs, they were the first codes of popular morals. Moreover they have stood the test of time, and the experience of every day still bears witness to their accuracy, force, and soundness. The proverbs of Solomon are full of wisdom, as to the force of industry, and the use and abuse of money:—“He that is slothful in work is brother to him that is a great waster.”—“Go to the ant, thou sluggard; consider her ways and be wise.” Poverty, he says, shall come upon the idler, “as one that travelleth, and want as an armed man;” but of the industrious and upright, “The hand of the diligent maketh rich.”—“He who will not plough by reason of the cold, shall beg in harvest, and have nothing.”—“The drunkard and the glutton shall come to poverty; and drowsiness shall clothe a man with rags.”—“The slothful man says there is a lion in the streets.”—“Seest thou a man diligent in his business? he shall stand before kings.”—But above all, “It is better to get wisdom than gold; for wisdom is better than rubies, and all the things that may be desired are not to be compared to it.”

Simple industry and thrift will go far towards making any person of ordinary working faculty comparatively independent in his means. Even a working man may be so, provided he will carefully husband his resources, and watch the little outlets of useless expenditure. A penny is a very small matter, yet the comfort of thousands of families depends upon the proper spending and saving of pennies. If a man allows the little pennies, the results of his hard work, to slip out of his fingers—some to the beershop, some this

way and some that—he will find that his life is little raised above one of mere animal drudgery. On the other hand, if he take care of the pennies—putting some weekly into a benefit society or an insurance fund, others into a savings' bank, and confiding the rest to his wife to be carefully laid out, with a view to the comfortable maintenance and education of his family—he will soon find that his attention to small matters will abundantly repay him, in increasing means, growing comfort at home, and a mind comparatively free from fears as to the future. If a working man have high ambition and possess richness in spirit,—a kind of wealth which far transcends all mere worldly possessions—he may not only help himself, but be a profitable helper of others in his path through life. That this is no impossible thing even for a common labourer in a workshop, may be illustrated by the remarkable career of Thomas Wright, of Manchester, whose life affords only another proof of the power of patient perseverance in well-doing, and of the influence which even the humblest person, who is diligent in improving his opportunities, may exercise for the advantage of his fellow creatures.

It was scarcely to have been expected, that one of the most difficult and apparently impossible of things, the reclamation of criminals, should have been not only attempted, but accomplished, by a man working for weekly wages in a foundry! Yet this work was done by Thomas Wright when employed with the Messrs. Ormerod, at Manchester. Accident first directed his attention to the difficulty encountered by liberated convicts in returning to habits of honest industry. His mind was possessed by the subject; and to remedy the evil became the purpose of his life. He did not neglect his work, for he honourably performed his duties as a foundry-man, and his working and business qualities were so highly prized by his employers, that he was gradually raised to the post of foreman of his shop. Nor did he neglect his family, for, upon comparatively small means, he respectably brought up a large family. Though he worked

from six in the morning till six at night, still there were leisure minutes that he could call his own—more especially his Sundays—and these he employed in the service of convicted criminals; a class then far more neglected than they are now. But a few minutes a day, well employed, can effect a great deal; and it will scarcely be credited, that in ten years this working man, by steadfastly holding to his purpose, succeeded in rescuing not fewer than three hundred felons from continuance in a life of villany! He came to be regarded as the moral physician of the Manchester Old Bailey; and when the Chaplain and all others failed, Thomas Wright often succeeded. Children he thus restored healed to their parents; sons and daughters otherwise lost, to their homes; and many a returned convict did he contrive to settle down to honest and industrious pursuits. The task was by no means easy. It required money, time, energy, prudence, and above all, character, and the confidence which character invariably inspires. The most remarkable circumstance of all is, that Wright relieved many of these poor outcasts out of the comparatively small wages earned by him at foundry work. He did all this on an income which did not average, during his working career, 100*l.* per annum; and yet, while he was able to bestow substantial aid on criminals, to whom he owed no more than the service of kindness which every human being owes to another, he also maintained his own family in comfort, and was, by frugality and carefulness, enabled to lay by a store of savings against his approaching old age. Every week he apportioned his income with deliberate care; so much for the indispensable necessities of food and clothing, so much for the landlord, so much for the schoolmaster, so much for the poor and needy; and the lines of distribution were resolutely observed. By such means did this humble workman pursue his great work, with the results we have so briefly described. His career affords one of the most remarkable and striking illustrations of the force of purpose in a man, of the might of small means carefully

and sedulously applied, and, above all, of the power which an energetic and upright character invariably exercises upon the lives and conduct of others.

There is no discredit, but honour, in every right walk of industry, whether it be in tilling the ground, making tools, weaving fabrics, or selling the products behind a counter. A youth may handle a yard stick, or measure a piece of ribbon; and there will be no discredit in doing so, unless he allows his mind to have no higher range than the stick and ribbon; to be as short as the one, and as narrow as the other. "Let not those blush who *have*," said Fuller, "but those who *have not* a lawful calling." And Bishop Hall said, "Sweet is the destiny of all trades, whether of the brow or of the mind." Men who have raised themselves from a humble calling, need not be ashamed, but rather ought to be proud of the difficulties they have surmounted. The labourer on his feet stands higher than the nobleman on his knees. An American President, when asked what was his coat-of-arms, remembering that he had been a hewer of wood in his youth, replied, "A pair of shirt sleeves." Lord Tenterden was proud to point out to his son the shop in which his father had shaved for a penny. A French doctor once taunted Flechier, Bishop of Nismes, who had been a tallow-chandler in his youth, with the meanness of his origin, to which Flechier replied, "If you had been born in the same condition that I was, you would still have been but a maker of candles." Some small spirits, ashamed of their origin, are always striving to conceal it, and by the very efforts they make to do so, betray themselves; like a dyer in the north, to whom money had come, earned by honest chimney-sweeping, who, feeling ashamed of chimneys, built his house without one, sending all his smoke into the shaft of his dyeworks. The benevolent Sir Thomas Bernard, one of the best practical philanthropists of his day, in his 'Tracts for bettering the Condition of the Poor,' makes honourable mention of "a very intelligent and

valuable man, Mr. David Porter, a master chimney-sweeper in Welbeck Street," who is another good illustration of the force of diligence and well doing. In early boyhood Porter was kidnapped for a sweep; the condition of climbing-boys at the time being one almost of slavery. The boy, however, had energy of body and mind, and survived the privations of his unfortunate class. At eighteen years of age he commenced business as a sweep on his own account. When employment was slack in his trade, he sought and found it in others; in summer and harvest time he went into Lincolnshire and worked at farm labour, always bringing home a little store of savings. But he did not neglect his mind: above all, he did not forget the hardships endured by the poor little climbing-boys: all of which he had himself passed through. He therefore devoted his leisure—snatched from a busy life—to write a treatise on the subject, which he printed and distributed amongst influential persons; thereby initiating, as Granville Sharp had done, the movement which issued in the amelioration of the sufferings of this class. Mr. Porter, by his frugality, industry, and application to business, eventually realized a large fortune, at the same time promoting the comforts of his boys and workmen in a manner altogether unknown and unusual at the time. On Sir Thomas Bernard asking Mr. Porter how he had succeeded in his business, and accumulated so large a fortune, he answered, "By never having an idle hour or an idle guinea." This was his whole secret.

Nothing, however, is more common than energy in money-making, quite independent of any higher object than its accumulation. A man who devotes himself to this pursuit, body and soul, can scarcely fail to become rich. Very little brains will do: spend less than you earn; add guinea to guinea; scrape and save; and the pile of gold will gradually rise. John Foster quoted a striking illustration of what this kind of determination will do in money-making. A young man who ran through his patrimony, spending it in profligacy, was at length reduced to

utter want and despair. He rushed out of his house intending to put an end to his life, and stopped on arriving at an eminence overlooking what were once his estates. He sat down, ruminated for a time, and rose with the determination that he would recover them. He returned to the streets, saw a load of coals which had been shot out of a cart on to the pavement before a house, offered to carry them in, and was employed. He thus earned a few pence, requested some meat and drink as a gratuity, which was given him, and the pennies were laid by. Pursuing this menial labour, he earned and saved more pennies; accumulated sufficient to enable him to purchase some cattle, the value of which he understood, and these he sold to advantage. He now pursued money with a step as steady as time, and an appetite as keen as death; advancing by degrees into larger and larger transactions, until at length he became rich. The result was, that he more than recovered his possessions, and died an inveterate miser. When he was buried, mere earth went to earth. With a nobler spirit, the same determination might have enabled such a man to be a benefactor to others as well as to himself. But the life and its end in this case were alike sordid.

The saving of money for the mere sake of it, is but a mean thing, even though earned by honest work; but where earned by dice-throwing, or speculation, and without labour, it is still worse. To provide for others and for our own comfort and independence in old age, is honourable, and greatly to be commended; but to hoard for mere wealth's sake is the characteristic of the narrow-souled and the miserly. It is against the growth of this habit of inordinate saving, that the wise man needs most carefully to guard himself: else, what in youth was simple economy, may in old age grow into avarice, and what was a duty in the one, may become a vice in the other. It is the *love* of money—not money itself—which is “the root of evil,”—a love which narrows and contracts the soul, and closes

it against generous life and action. Hence, Sir Walter Scott makes one of his characters declare that "the penny siller slew mair souls than the naked sword slew bodies." It is one of the defects of business too exclusively followed, that it insensibly tends to a mechanism of character. The business man gets into a rut, and often does not look beyond it. If he lives for himself only, he becomes apt to regard other human beings only in so far as they minister to his ends. Take a leaf from such men's ledger, and you have their life. It is said of one of our most eminent modern men of business—withal a scrupulously honourable man—who spent his life mainly in money-making, and succeeded, that when upon his death-bed he turned to his favourite daughter, and said solemnly to her "Hasn't it been a mistake, ——?" He had been thinking of the good which other men of his race had done, and which he might have done, had he not unhappily found exclusive money-making to be a mistake when it was too late to remedy it; and, when he must leave behind him his huge pile of gold, the accumulation of which had been almost the sole object of his life.

Worldly success, measured by the accumulation of money, is no doubt a very dazzling thing; and all men are naturally more or less the admirers of worldly success. But though men of persevering, sharp, dexterous, and unscrupulous habits, ever on the watch to push opportunities, may and do "get on" in the world, yet it is quite possible that they may not possess the slightest elevation of character, nor a particle of real greatness. He who recognises no higher logic than that of the shilling, may become a very rich man, and yet remain all the while an exceedingly poor creature. For riches are no proof whatever of moral worth; and their glitter often serves only to draw attention to the worthlessness of their possessor, as the glowworms light reveals the grub. "In morals," says Mr. Lynch,*

* 'Lectures in aid of Self-Improvement;' a book somewhat didactic in its manner, but full of manly vigour and golden thought.

“a penny may outweigh a pound—may represent more industry and character. The money that witnesses of patient, inventive years of fair dealing and brave dealing, proves ‘worth’ indeed. But neither a man’s means nor his worth are measurable by his money. If he has a fat purse and a lean heart, a broad estate and a narrow understanding, what will his ‘means’ do for him—what will his ‘worth’ gain him?” Let a man be what he will, it is the mind and heart that make a man poor or rich, miserable or happy; for these are always stronger than fortune.

The manner in which so many allow themselves to be sacrificed to their love of wealth, reminds one of the cupidity of the monkey—that caricature of our species. In Algiers, the Kabyle peasant attaches a gourd, well fixed, to a tree, and places within it some rice. The gourd has an opening merely sufficient to admit the monkey’s paw. The creature comes to the tree by night, inserts his paw, and grasps his booty. He tries to draw it back, but it is clenched, and he has not the wisdom to unclench it. So there he stands till morning, when he is caught, looking as foolish as may be, though with the prize in his grasp. The moral of this little story is capable of a very extensive application in life.

The power of money is on the whole over-estimated. The greatest things which have been done for the world have not been accomplished by rich men, nor by subscription lists, but by men generally of small pecuniary means. Christianity was propagated over half the world by men of the poorest class; and the greatest thinkers, discoverers, inventors, and artists, have been men of moderate wealth, many of them little raised above the condition of manual labourers in point of worldly circumstances. And it will always be so. Riches are oftener an impediment than a stimulus to action; and in many cases they are quite as much a misfortune as a blessing. The youth who inherits wealth is apt to have life made too easy for him, and he soon grows sated with it, because he has nothing left to desire. Having no

special object to struggle for, he finds time hang heavy on his hands; he remains morally and spiritually asleep; and his position in society is often no higher than that of a polypus over which the tide floats.

“His only labour is to kill the time,
And labour dire it is, and weary woe.”

Yet the rich man, inspired by a right spirit, will spurn idleness as unmanly; and if he bethink him of the responsibilities which attach to the possession of wealth and property, he will feel even a higher call to work than men of poorer lot. This, however, must be admitted to be by no means the practice of life. The golden mean of Agur's perfect prayer is, perhaps, the best lot of all, if we did but know it: “Give me neither poverty nor riches; feed me with food convenient for me.” The late Joseph Brotherton left a fine motto to be recorded upon his monument in the Peel Park at Manchester,—the declaration in his case being strictly true: “My richness consisted not in the greatness of my possessions, but in the smallness of my wants.” He rose, as we have seen, from the humblest station, that of a factory boy, to an eminent position of usefulness, by the simple exercise of homely honesty, industry, punctuality, and self-denial. Down to the close of his life, when not attending Parliament, he did duty as minister in a small chapel in Manchester to which he was attached; and in all things he made it appear, to those who knew him in private life, that the glory he sought was *not* “to be seen of men,” or to excite their praise, but to earn the consciousness of discharging the every-day duties of life, down to the smallest and humblest of them, in an honest, upright, truthful, and loving spirit.

“Respectability,” in its best sense, is good. The respectable man is one worthy of regard, literally worth turning back to look at. But the respectability that consists in merely keeping up appearances is not worth look

ing at in any sense. Far better and more respectable is the good poor man than the bad rich one—better the humble silent man than the agreeable well-appointed rogue, who keeps his gig. A well-balanced and well-stored mind, a life full of useful purpose, whatever the position occupied in it may be, is of far greater importance than average worldly respectability. The highest object of life we take to be, to form a manly character, and to work out the best development possible, of body and spirit—of mind, conscience, heart, and soul. This is the end: all else ought to be regarded but as the means. Accordingly, that is not the most successful life in which a man gets the most pleasure, the most money, the most power or place, honour or fame; but that in which a man gets the most manhood, and performs the greatest amount of useful work and of human duty. Money is power after its sort, it is true; but intelligence, public spirit, and moral virtue, are powers too, and far nobler ones. “Let others plead for pensions,” wrote Lord Collingwood to a friend; “I can be rich without money, by endeavouring to be superior to everything poor. I would have my services to my country unstained by any interested motive; and old Scott* and I can go on in our cabbage-garden without much greater expense than formerly.” On another occasion he said, “I have motives for my conduct which I would not give in exchange for a hundred pensions.”

The making of a fortune may no doubt enable some people to “enter society,” as it is called; but to be esteemed there, they must possess qualities of mind, manners, or heart, else they are merely rich people, nothing more. There are men “in society” now, as rich as Croesus, who have no consideration extended towards them, and elicit no respect. For why? They are but as money-bags: their

* His old gardener. Collingwood’s favourite amusement was gardening. Shortly after the battle of Trafalgar a brother admiral called upon him, and, after searching for his lordship all over the garden, he at last discovered him, with old Scott, in the bottom of a deep trench which they were busily employed in digging.

only power is in their till. The men of mark in society—the guides and rulers of opinion—the really successful and useful men—are not necessarily rich men; but men of sterling character, of disciplined experience, and of moral excellence. Even the poor man like Thomas Wright, though he possess but little of this world's goods, may, in the self-consciousness of a well-cultivated nature, of opportunities used and not abused, of a life spent to the best of his means and ability, look down, without the slightest feeling of envy, upon the person of mere worldly success, the man of money-bags and acres.

CHAPTER X.

SELF-CULTURE.

“Every person has two educations, one which he receives from others, and one, more important, which he gives to himself.”—*Gibbon*.

“These two things, contradictory as they may seem, must go together—manly dependence and manly independence, manly reliance and manly self-reliance.”—*Wordsworth*.

SELF-CULTURE includes the education or training of all parts of a man's nature; the physical and moral, as well as the intellectual. Each must be developed, and yet each must yield something to satisfy the claims of the others. Cultivate the physical powers exclusively, and you have an athlete or a savage; the moral only, and you have an enthusiast or a maniac; the intellectual only, and you have a diseased oddity, it may be a monster. It is only by wisely training all three together that the complete man can be formed.

The ancients laid great stress on physical training, and a sound mind in a sound body was the end which they professed to aim at in their highest schools of culture. The Greek teachers were peripatetic, holding that young men should only learn what they could learn standing. The old English entertained a similar idea, embodied in the maxim, “The field in summer, the study in winter.” Milton described himself as up and stirring early in the morning—“in winter, often ere the sound of any bell wakes man to labour or devotion; in summer, as oft with the bird that first rouses, or not much tardier, to read good authors, or to cause them to be read till the attention be

ready, or memory have its full fraught; then, with clear and generous labour, preserving the body's health and hardiness, to render lightsome, clear, and not lumpish obedience to the mind, to the cause of religion, and our country's liberty." In his 'Tractate on Education' he recommends the physical exercise of fencing to young men, as calculated to "keep them healthy, nimble, strong, and well in breath, and also as the likeliest means to make them grow large and tall, and inspire them with a gallant and fearless courage," and he further urges that they should "be practised in all the locks and grips of wrestling, wherein Englishmen were wont to excel."

In our day, such exercises have somewhat fallen into disrepute, and education has become more exclusively mental; very much to the detriment of the bodily health. The brain is cultivated at the expense of the members, and the physical is usually found in an inverse ratio to the intellectual appetite. Hence, in this age of progress, we find so many stomachs weak as blotting-paper,—hearts indicating "fatty degeneration,"—unused, pithless hands, calveless legs and limp bodies, without any elastic spring in them. But it is not merely health that suffers by neglect and disuse of the bodily organs. The mind itself grows sickly and distempered, the pursuit of knowledge itself is impeded, and manhood becomes withered, twisted, and stunted. It is, perhaps, to this neglect of physical exercise that we find amongst students so frequent a tendency towards discontent, unhappiness, inaction, and reverie,—displaying itself in a premature contempt for real life, and disgust at the beaten tracks of men,—a tendency which in England has been called Byronism, and in Germany Wertherism. Dr. Channing noted the same growth in America, which led him to make the remark, that "too many of our young men grow up in a school of despair." The only remedy for this green-sickness in youth is abundant physical exercise,—action, work, and bodily occupation of any sort.

Daniel Malthus urged his son when at college to be most diligent in the cultivation of knowledge, but he also enjoined him to pursue manly sports as the best means of keeping up the full working power of his mind, as well as of enjoying the pleasures of intellect. "Every kind of knowledge," said he, "every acquaintance with nature and art, will amuse and strengthen your mind, and I am perfectly pleased that cricket should do the same by your arms and legs; I love to see you excel in exercises of the body, and I think myself that the better half, and much the most agreeable part, of the pleasures of the mind, is best enjoyed while one is upon one's legs." But a still more important use of active employment is that enforced by the great divine, Jeremy Taylor. "Avoid idleness," he says, "and fill up all the spaces of thy time with severe and useful employment; for lust easily creeps in at those emptinesses where the soul is unemployed, and the body is at ease; for no easy, healthful, idle person was ever chaste if he could be tempted; but of all employments, bodily labour is the most useful, and of the greatest benefit for driving away the devil."

Practical success in life depends much more upon physical health than is generally imagined. Hodson, of Hodson's Horse, writing home to a friend in England, said, "I believe, if I get on well in India, it will be owing, physically speaking, to a sound digestion." The capacity for continuous working in any calling must necessarily mainly depend upon this; and hence the necessity for attending to health, even as a means of intellectual labour itself. It is in no slight degree to the boating and cricketing sports still cultivated at our best public schools and universities, that they produce so many specimens of healthy, manly, and vigorous men, of the true Hodson stamp. It is said that the Duke of Wellington, when once looking on at the boys engaged in their sports in the play-ground at Eton, where he had spent his own juvenile days, made the pregnant remark, "It was there that the battle of Waterloo was won!"

The cultivation of muscularity may doubtless be overestimated; yet it is unquestionably important that every young man should be early trained to the free use of his body and limbs. This, however, is one of the "common things" in modern education which is apt to be neglected. There are many youths who leave school and college full of the learning of the ancient Greeks and Romans, who, as regards the use of their own hands, are almost helpless. In gerunds and participles the mere student may be profound, but in the use of his eyes—in the faculty of common observation—he may be inferior to a ploughman. Though he may have taken the highest honours, he will sometimes, in common matters, be found beneath the level of the smith, the carpenter, or the navvy. "At sea he is a land-lubber, in the country a cockney, in town a greenhorn, in science an ignoramus, in business a simpleton, in pleasure a milksop—everywhere out of his element, everywhere at sea, in the clouds, adrift, or by whatever words utter ignorance and incapacity are to be described."*

Perhaps, as educators grow wiser, they may become more practical, and recognise as among the chief objects of education, to fit men for actual life, and enable them to understand and take part in the daily business of common men. Nor would the education of youths in common things be found incompatible with the very highest intellectual culture, but the reverse. Even some training in the use of tools in a workshop, for instance, would be found a good adjunct to education,—for it would teach young men the use of their hands and arms, familiarize them with healthy work, exercise their faculties upon things tangible and actual, give them some practical acquaintance with mechanics, impart to them the ability of being useful, and implant in them the habit of persevering physical effort. This is an advantage which the working classes, strictly so called, certainly possess over the leisure classes,—that they are in early life under the necessity of applying themselves

* Article in the 'Times.'

laboriously to some mechanical pursuit or other,—thus acquiring manual dexterity and the use of their physical powers. The chief disadvantage attached to the calling of the laborious classes is, not that they are employed in physical work, but that they are too exclusively so employed, often to the neglect of their moral and intellectual faculties. While the youths of the leisure classes, having been taught to associate labour with servility, have shunned it, and been allowed to grow up practically ignorant, the poorer classes, confining themselves within the circle of their laborious callings, have been allowed to grow up in a large proportion of cases absolutely illiterate. It seems possible, however, to avoid both these evils by combining physical training or physical work with intellectual culture; and there are various signs abroad which seem to mark the gradual adoption of this healthier system of education.

The use of early labour in self-imposed mechanical employments is curiously illustrated by the boyhood of Sir Isaac Newton. Though a comparatively dull scholar, he was most assiduous in the use of his saw, hammer, and natchet—"knocking and hammering in his lodging-room"—making models of windmills, carriages, and machines of all sorts; and as he grew older, he took delight in making little tables and cupboards for his friends. Smeaton, Watt, and Stephenson, were equally handy with tools when mere boys; and but for such kind of self-culture in their youth, it is doubtful whether they would have accomplished so much in their manhood. Such was also the early training of the great inventors and mechanics described in the preceding pages, whose contrivance and intelligence were practically trained by the constant use of their hands in early life. Even where men belonging to the manual labour class have risen above it, and become more purely intellectual labourers, they have found the advantages of their early training in their later pursuits. Elihu Burritt even found hard labour *necessary* to enable him to study with effect; and

more than once he gave up school-keeping and study, and, taking to his leather apron again, went back to his blacksmith's forge and anvil, for his health of body and mind's sake.

The same view was well urged by Mr. R. M. Milnes, M.P., at a recent meeting of a mechanics' institute. "He believed," he said, "that the habit of mechanical work—precise, earnest, industrious, good, mechanical work—would best lead men on to good mental and intellectual work. A good workman in the materials of life would, if he had the talent, be a good workman in the materials of the mind; and thus it was that they found that the most remarkable men who had risen from the lower ranks of society, had not risen from those who had abstained from work, but from those who had been the most industrious, the most active, and the most intelligent in their own mechanical occupations. There were two things which operated against young men advancing in intellectual progress—over-work and under-work. He thought it no disadvantage whatever to a man's intellectual progress to have something else to do; and if they looked at the upper classes of society they would find it was equally true in their case as it was in their own—namely, that the man who had the most active occupation was the man who in public life the most distinguished himself, and became the most useful to his country."

The success even of professional men depends in no slight degree on their organic stamina and cultivated physical strength. Thus a well-developed thorax is considered almost as indispensable to the successful lawyer or politician as a well-cultured intellect. The thorough aëration of the blood by free exposure to a large breathing surface in the lungs, is necessary to maintain that full vital power on which the vigorous working of the brain in so large a measure depends. The lawyer has to climb the heights of his profession through close and heated courts, and the political leader has to bear the fatigue and excite-

ment of long and anxious debates in a crowded House. Hence the lawyer in full practice and the parliamentary leader in full work are called upon to display powers of physical endurance and activity even more extraordinary than those of the intellect,—such powers as have been exhibited in so remarkable a degree by Brougham, Lyndhurst, and Campbell; by Peel, Graham, and Palmerston—all full-chested men.

The marvellous and still juvenile vitality of Lord Palmerston has long been matter of surprise. But it was his pride and pleasure as a youth, to be the best rower, jumper, and runner; to be first in the sports of the field as he has since been first in the senate; and to this day his horse and gun are invariably resorted to in his hours of relaxation. As for Lord Brougham, legends of his enormous powers of labour and triumphs over the frail physique of humanity, have gathered round him like a Hercules; and with reference to him and others of his class, the observation of a public writer* is doubtless in a great measure true—that “the greatness of our great men is quite as much a bodily affair as a mental one.” It is in the physical man that the moral as well as the intellectual man lies hid; and it is through the bodily organs that the soul itself works. The body, as old Burton says, “is *domicilium animæ*, her home, abode, and stay; and, as a torch gives a better light, a sweeter smell, according to the matter it is made of, so doth our soul perform all her actions better or worse, as her organs are disposed; or, as wine savours of the cask wherein it is kept, the soul receives a tincture from the body, through which it works.”

Sir Walter Scott, when attending the University at Edinburgh, though he went by the name of “The Great Blockhead,” was, notwithstanding his lameness, a remarkably healthy youth, and could spear a salmon with the best fisher on the Tweed, or ride a wild horse with any hunter in Yarrow. When devoting himself in after life to literary

* The ‘Times.’

pursuits, Sir Walter never lost his taste for field sports; but while writing 'Waverley' in the morning, he would in the afternoon course hares. Professor Wilson was a very athlete, as great at throwing the hammer as in his flights of eloquence and poetry; and Burns, when a youth, was remarkable chiefly for his leaping, putting, and wrestling. Some of our greatest divines were distinguished in their youth for their physical energies. Isaac Barrow, when at the Charterhouse School, was notorious for his pugilistic encounters, in which he got many a bloody nose; Andrew Fuller, when working as a farmer's lad at Soham, was chiefly famous for his skill in boxing; and Adam Clarke, when a boy, was only remarkable for the strength displayed by him in "rolling large stones about;" the secret, possibly, of some of the power which he subsequently displayed in rolling forth large thoughts in his manhood.

While it is necessary, then, in the first place to secure this solid foundation of physical health, it must also be observed that the cultivation of the habit of mental application is quite indispensable for the education of the student. The maxim that "Labour conquers all things" holds especially true in the case of the conquest of knowledge. The road into learning is free to all who will give the labour and the study requisite to gather it; nor are there any difficulties so great that the student of resolute purpose may not effectually surmount and overcome them. It was one of the characteristic expressions of Chatterton, that God had sent his creatures into the world with arms long enough to reach anything, if they chose to be at the trouble. In study, as in business, energy is the great thing. There must be the "fervet opus"—we must not only strike the iron while it is hot, but strike it till it is made hot. The proverb says, "He who has heart has everything;" and *Che non arde non incende*, Who doth not burn doth not inflame. It is astonishing how much may be accomplished in self-culture by the energetic and the persevering, who are careful to avail themselves of opportunities, and use up the fragments of

spare time which the idle permit to run to waste. Thus Ferguson learnt astronomy from the heavens, while wrapt in a sheep-skin on the highland hills. Thus Stone learnt mathematics while working as a journeyman gardener; thus Drew studied the highest philosophy in the intervals of cobbling shoes; thus Miller taught himself geology while working as a day labourer in a quarry. By bringing their mind to bear upon knowledge in its various aspects, and carefully using up the very odds and ends of their time,—men such as these, in the very humblest circumstances, reached the highest culture, and acquired honourable distinction amongst their fellow-men.

Sir Joshua Reynolds, as we have already observed, was so earnest a believer in the power of industry, that he held that all men might achieve excellence if they would but exercise the power of assiduous and patient working. He held that drudgery was on the road of genius, and that there were no limits to the proficiency of an artist except the limits of his own pains-taking. He would not believe in what is called inspiration, but only in study and labour. “Excellence,” he said, “is never granted to man but as the reward of labour.” “If you have great talents, industry will improve them; if you have but moderate abilities, industry will supply their deficiency. Nothing is denied to well-directed labour; nothing is to be obtained without it.” Sir Fowell Buxton, who laboured in a very different field, was an equal believer in the power of study; and he entertained the modest idea that he could do as well as other men if he devoted to the pursuit double the time and labour that they did. He placed his great confidence only in ordinary means, and extraordinary application. Genius, without work, is certainly a dumb oracle; and it is unquestionably true, that the men of the highest genius have invariably been found to be amongst the most plodding, hard-working, and intent men,—their chief characteristic apparently consisting simply in their power of labouring more intensely and effectively than others.

Thoroughness and accuracy are two principal points to be aimed at in study. Francis Horner, in laying down rules for the cultivation of his mind and character, placed great stress upon the habit of continuous application to one subject for the sake of mastering it thoroughly; confining himself, with this object, to but a few books, and resisting with the greatest firmness "every approach to a habit of desultory reading." The value of knowledge to any man certainly consists not in its quantity, but mainly in the good uses to which he may apply it. Hence a little knowledge, of an exact and perfect character, is always found more valuable for practical purposes than any extent of superficial learning. The phrase in common use, as to "the *spread* of knowledge" at this day, is no doubt correct, but it is spread so widely, and in such thin layers, that it only serves to reveal the mass of ignorance lying beneath. Never perhaps were books more extensively read, or less studied; and the number is rapidly increasing of those who know a little of everything, but nothing well. Such readers have not inaptly been likened to a certain sort of pocket-knife which some people carry about with them, which, in addition to a common knife, contains a file, a chisel, a saw, a gimlet, a screw-driver, and a pair of scissors, but all so diminutive, that the moment they are needed for use, they are found useless.

One of Ignatius Loyola's maxims was, "He who does well one work at a time, does more than all." By spreading our efforts over too large a surface we inevitably weaken our force, hinder our progress, and acquire a habit of fitfulness and ineffective working. Whatever a youth undertakes to learn, he should not be suffered to leave it until he can reach his arms round it and clench his hands on the other side. Thus he will learn the habit of thoroughness. Lord St. Leonards once communicated to Sir Fowell Buxton the mode in which he had conducted his studies, and thus explained the secret of his success. "I resolved," said he, "when beginning to read law, to make every-

thing I acquired perfectly my own, and never to go to a second thing till I had entirely accomplished the first. Many of my competitors read as much in a day as I read in a week; but, at the end of twelve months, my knowledge was as fresh as the day it was acquired, while theirs had glided away from recollection." Sir E. B. Lytton once explaining how it was that, whilst so fully engaged in active life, he had written so many books, observed, "I contrive to do so much by never doing too much at a time. As a general rule, I have devoted to study not more than three hours a day; and, when Parliament is sitting, not always that. But then, during those hours, I have given my whole attention to what I was about."

It is not the quantity of study that one gets through, or the amount of reading, that makes a wise man; but the appositeness of the study to the purpose for which it is pursued; the concentration of the mind for the time being, upon the subject under consideration; and the habitual discipline by which the whole system of mental application is regulated. Abernethy was even of opinion that there was a point of saturation in his own mind, and that if he took into it something more than it could hold, it only had the effect of pushing something else out. Speaking of the study of medicine, he said, "If a man has a clear idea of what he desires to do, he will seldom fail in selecting the proper means of accomplishing it." The most profitable study is that which is conducted with a definite and specific object,—all observation, reflection, and reading, being directed upon it for the time being. By thoroughly mastering any given branch of knowledge, we render it much more available for use at any moment. Hence it is not enough merely to have books, or to know where to read up for information as we want it. Practical wisdom, for the purposes of life, must be carried about with us, and be ready for use at call. It is not sufficient that we have a fund laid up at home, but not a farthing in the pocket: we must carry about with us a store of the current coin of

knowledge ready for exchange on all occasions, else we are comparatively helpless when the opportunity for action occurs.

Decision and promptitude are as requisite in self-culture as in business. The growth of these qualities may be encouraged by accustoming young people to rely upon their own resources, leaving them to enjoy as much freedom of action in early life as is practicable. Too much guidance and restraint hinder the formation of habits of self-help. They are like bladders tied under the arms of one who has not taught himself to swim. Want of confidence is perhaps a greater obstacle to improvement than is generally imagined. True modesty is quite compatible with a due estimate of one's own merits, and does not demand the abnegation of all merit. Though there are no doubt many conceited persons who deceive themselves by putting a false figure before their ciphers, the want of confidence, the want of faith in one's self, and consequently the want of promptitude in action, is a defect of character which is found to stand very much in the way of individual advancement. It has been said that half the failures in life arise from pulling in one's horse while he is leaping. Dr. Johnson was accustomed to attribute all his success to confidence in his own powers. It is indeed very often the case that the reason why so little is done, is because so little is attempted,—that we do not succeed, simply because we persist in standing in our own light. One step out of the way might help us, but that one step we do not take.

There is no want of desire on the part of most persons at this day to arrive at the results of self-culture, but there is a great aversion to pay the inevitable price for it, of hard work. Dr. Johnson held that "impatience of study was the mental disease of the present generation;" and the remark is still applicable. We may not believe that there is a royal road to learning, but we seem to believe very firmly in a "popular" one. In education, we invent

labour-saving processes, seek short cuts to science, learn French and Latin "in twelve lessons," or "without a master." We resemble the lady of fashion, who engaged a master to teach her on condition that he did not plague her with verbs and participles. We get our smattering of science in the same way; we learn chemistry by listening to a short course of lectures enlivened by experiments, and when we have inhaled laughing gas, seen green water turned to red, and phosphorus burnt in oxygen, we have got our smattering, of which the most that can be said is, that though it may be better than nothing, it is yet good for nothing. Thus we often imagine we are being educated while we are only being amused.

The evil is a growing one, and operates in various ways. Its least mischief is shallowness; its greatest, the aversion to steady labour which it engenders, and the low and feeble tone of mind which it induces. If we would be really wise, we must diligently apply ourselves, and confront the same continuous application which our forefathers did; for labour is still, and ever will be, the inevitable price set upon everything which is valuable. We must be satisfied to work energetically with a purpose, and wait the results with patience. Buffon has even said of Patience, that it is Genius,—the power of great men, in his opinion, consisting mainly in their power of continuous working and waiting. All progress, of the best kind, is slow; but to him who works faithfully and in a right spirit, be sure that the reward will be vouchsafed in its own good time. "Courage and industry," says Sharpe, "must have sunk in despair, and the world must have remained unimproved and unornamented, if men had merely compared the effect of a single stroke of the chisel with the pyramid to be raised, or of a single impression of the spade with the mountain to be levelled." We must continuously apply ourselves to right pursuits, and we cannot fail to advance steadily, though it may be unconsciously. By degrees, the spirit of industry, exercised in the common

forms of education, will be transferred to objects of greater dignity and more extensive usefulness. And still we must work on; for the work of self-culture is never finished. "To be employed," said the poet Gray, "is to be happy." "It is better to wear out than rust out," said Bishop Cumberland. "Have we not all eternity to rest in?" exclaimed Arnauld.

It is a mark of the short-sighted labourer to be impatient of growth. It must show itself in a sensible form, and almost at once, to satisfy him. Like little children, eager to see their seeds growing, he will pull his plants up to see what progress they are making, and so kill them. But man who plants and sows, must wait in patience and in faith—faith in the bountiful spring, and summer, and autumn, which will follow. He must sometimes even content himself with the thought that his children shall enjoy the fruits. Some young men, in one of Lafontaine's fables, ridicule an old patriarch of fourscore, engaged in planting an avenue of young trees. The youths told him he would not live to see them as high as his head. "Well," replied the aged worker, "what of that? If their shade afford me no pleasure, it may afford pleasure to my children, and even to you; and therefore, the planting of them affords me pleasure." Not long ago, a poor workman who had been working for the future lay dying, his wife and children sobbing around his bed; the sufferer was agonized by the thought of their struggle with the world without him; and the certainty of that struggle embittered his last moments. "My poor Willy! my poor Mary!" he cried in despair, "what will become of them!" Consolation was tried, but for some time in vain. At last one thoughtful friend said to him, hopefully, "Fear not! you leave to them a rich legacy; rest assured your teachings will not be forgotten; the seed you have sown will not be lost; and your books, which to you have been such household gods, will be the same to them, and open their minds, and through them minister lovingly to the great God of all!"

“Oh! peace, consolation,” said the dying man, and spake no more.

The highest and most effective culture of all resolves itself into Self-Culture. The education received at school and college is but a beginning, and is mainly valuable in so far as it trains us in the habit of continuous application, and facilitates self-education after a definite plan and system. To enable the mind freely to exercise its powers, it is necessary, even under the most thorough system of culture, that there should be occasional gaps for its free operation. Thus left in some measure to find out what it can do and what it cannot do, it will gain in strength and activity, and the evils arising from a too entire dependence on the teaching of others will be in a great degree avoided. Often the best education of a man is that which he gives himself, while engaged in the active pursuits of practical life. Putting ideas into one's head will do the head no good, no more than putting things into a bag, unless it re-act upon them, make them its own, and turn them to account. “It is not enough,” said John Locke, “to cram ourselves with a great load of collections; unless we chew them over again, they will not give us strength and nourishment.” That which is put into us by others is always far less ours than that which we acquire by our own diligent and persevering effort. Knowledge conquered by labour, becomes a possession—a property entirely our own. A greater vividness and permanency of impression is secured; and facts thus acquired become registered in the mind in a way that mere imparted information can never produce. This kind of self-culture also calls forth power and cultivates strength. The self-solution of one problem helps the mastery of another; and thus knowledge is carried into faculty. Our own active effort is the essential thing; and no facilities, no books, no teachers, no amount of lessons learnt by rote, will enable us to dispense with it. Such a spirit infused into self-culture gives birth to a living teaching, which inspires with purpose the whole man—

impressing a distinct stamp upon the mind, and actively promoting the formation of principles and habitudes of conduct.

The best teachers have been prompt to recognise the importance of self-culture, and of stimulating the student early to accustom himself to acquire knowledge by the active exertion of his own faculties. They have relied more upon *training* than upon *telling*; and sought to make their pupils themselves active parties to the work in which they were engaged; thus making teaching something far higher than the mere passive reception of the scraps and details of knowledge. This was the spirit in which the great Dr. Arnold worked; he strove to teach his pupils to rely upon themselves, and to develop their own powers, himself merely guiding, directing, stimulating, and encouraging them. "I would far rather," he said, "send a boy to Van Diemen's Land, where he must work for his bread, than send him to Oxford to live in luxury, without any desire in his mind to avail himself of his advantages." "If there be one thing on earth," he observed on another occasion, "which is truly admirable, it is to see God's wisdom blessing an inferiority of natural powers, when they have been honestly, truly, and zealously cultivated." Speaking of a pupil of this character, he said, "I would stand to that man hat in hand." Once at Laleham, when teaching a rather dull boy, he spoke somewhat sharply to him, on which the pupil looked up in his face and said, "Why do you speak angrily, sir? *indeed*, I am doing the best I can." Years afterwards, Arnold used to tell the story to his children, and added, "I never felt so much in my life—that look and that speech I have never forgotten."

There is no more personal merit attaching to the possession of naturally superior intellectual powers than in the succession to a large estate. It is the use which is made of the one, as of the other, which constitutes the only just claim to respect. A great fund of knowledge may be accumulated without any purpose; and though a source of

pleasure to the possessor, it may be of little use to any one else. It is not mere literary culture that makes a man. For it is possible to have read many books and waded through many sciences, and yet to possess no sound intellectual discipline; whilst others, without any regular scholastic culture, may, by the diligent exercise of their judgment and observation, have acquired eminent mental vigour.

An often quoted expression at this day is that "Knowledge is power;" but so also are fanaticism, despotism, and ambition. Knowledge of itself, unless wisely directed, might merely make bad men more dangerous, and the society in which it was regarded as the highest good, little better than a pandemonium. Knowledge must be allied to goodness and wisdom, and embodied in upright character, else it is naught. Pestalozzi even held intellectual training by itself to be pernicious; insisting that the roots of all knowledge must strike and feed in the soil of the religious rightly-governed will. The acquisition of knowledge may, it is true, protect a man against the meaner felonies of life; but not in any degree against its selfish vices, unless fortified by sound principles and habits. Hence do we find in daily life, so many instances of men who are well-informed in intellect, but utterly deformed in character; filled with the learning of the schools, yet possessing little practical wisdom, and offering examples rather for warning than imitation.

It is possible that at this day we may even exaggerate the importance of literary culture. We are apt to imagine that because we possess many libraries, institutes, and museums, we are making great progress. But it is not improbable that such facilities may as often be a hindrance as a help to individual self-culture of the highest kind. The possession of a library, or the free use of it, no more constitutes learning, than the possession of wealth constitutes generosity. Though we undoubtedly possess great facilities, it is nevertheless true, as of old, that

wisdom and understanding can only become the possession of individual men by travelling the old road of observation, attention, perseverance, and industry. The possession of the mere materials of knowledge is something very different from wisdom and understanding, which are reached through a higher kind of discipline than that of reading.

“ Knowledge dwells

In heads replete with thoughts of other men ;
Wisdom, in minds attentive to their own.
Knowledge, a rude unprofitable mass,
The mere materials with which wisdom builds,
Till smooth'd and squared, and fitted to its place,
Does but encumber, whom it seems t' enrich.”

The multitude of books which modern readers wade through, may produce distraction as much as culture; the process leaving no more definite impression upon the mind than gazing through the shifting forms in a kaleidoscope does upon the eye. Reading is often but a mere passive reception of other men's thoughts; there being little or no active effort of the mind in the transaction. Then how much of our reading is but the indulgence of a sort of literary epicurism, or intellectual dram-drinking, imparting a grateful excitement for the moment, without the slightest effect in improving and enriching the mind or building up the character. Thus many indulge themselves in the conceit that they are cultivating their minds, when they are only employed in the humbler occupation of killing time; of which perhaps the best that can be said is, that it merely keeps them from doing worse things.

Mr. Carlyle, when applied to by a young friend for advice as to the books he was to read, wrote him as follows:—“It is not by books alone, nor by books chiefly, that a man becomes in all parts a man. Study to do faithfully whatsoever thing in your actual situation, there and now, you find either expressly or tacitly laid to your charge; that is your post; stand to it like a true soldier. A man perfects himself by work much more than by reading. They are a growing kind of men that can wisely

combine the two things,—wisely, valiantly can do what is laid to their hand in their present sphere, and prepare themselves withal for doing other wider things, if such lie before them.”

It is also to be borne in mind that the experience gathered from books, though often valuable, is but of the nature of *learning*; whereas the experience gained from actual life is of the nature of *wisdom*; and a small store of the latter is worth vastly more than any stock of the former. Lord Bolingbroke truly said that “Whatever study tends neither directly nor indirectly to make us better men and citizens, is at best but a specious and ingenious sort of idleness, and the knowledge we acquire by it, only a creditable kind of ignorance—nothing more.”

Useful and instructive though good reading may be, it is yet only one mode of cultivating the mind; and is much less influential than practical experience and good example in the formation of character. There were wise, valiant, and true-hearted men bred in England, long before the existence of a reading public. Magna Charta was secured by men who signed the deed with their marks. Though altogether unskilled in the art of deciphering the literary signs by which principles were denominated upon paper, they yet understood and appreciated, and boldly contended for, the things themselves. Thus the foundations of English liberty were laid by men, who, though illiterate, were nevertheless of the very highest stamp of character. And it must be admitted that the chief object of culture is, not merely to fill the mind with other men's thoughts—and to be the passive recipients of their impressions of things—but to enlarge our individual intelligence, and render us more useful and efficient workers in the sphere of life to which we may be called. Many of our most energetic and useful workers have been but sparing readers. Brindley and Stephenson did not learn to read and write until they reached manhood, and yet they did great works and lived manly lives; John Hunter could barely read or write

when he was twenty years old, though he could make tables and chairs with any carpenter in the trade. "I never read," said the great physiologist when lecturing before his class; "this" (pointing to some part of the subject before him), "this is the work that you must study if you wish to become eminent in your profession." When told that one of his contemporaries had charged him with being ignorant of the dead languages, he said, "I would undertake to teach him that on the dead body which he never knew in any language, dead or living."

It is not how much a man may know, that is of so much importance, as the end and purpose for which he knows it. The object of knowledge should be, to mature wisdom and improve character, to render us better, happier, and more useful; more benevolent, more energetic, and more efficient in the pursuit of every high purpose in life. We must ourselves *be* and *do*, and not rest satisfied merely with reading and meditating over what other men have been and done. Our best light must be made life, and our best thought action. The humblest and least literate must train his sense of duty, and accustom himself to an orderly and diligent life. Though talents are the gift of nature, the highest virtue may be acquired by men of the humblest abilities, through careful self-discipline. At least we ought to be able to say, as Richter did, "I have made as much out of myself as could be made of the stuff, and no man should require more." It is every man's duty to discipline and guide himself, with God's help, according to his responsibilities and the faculties he is endowed with. Guided by the good example and good works of others, we must yet rely mainly upon our own inward efforts, and build upon our own foundations.

Self-discipline and self-control are the beginnings of practical wisdom; and these must have their root in self-respect. Hope springs from it—hope, which is the companion of power, and the mother of success; for whoso hopes strongly has within him the gift of miracles. The

humblest may say, "To respect myself, to develop myself—this is my true duty in life. An integral and responsible part of the great system of society, I owe it to society and to its Author not to degrade, nor destroy, my body, mind, nor instincts. On the contrary, I am bound to the best of my power to give to those parts of my nature the highest degree of perfection possible. I am not only to suppress the evil, but to evoke the good elements in my nature. And as I respect my own nature, so am I equally bound to respect others, as they on their part are bound to respect me." Hence mutual respect, justice, and order, of which law becomes the written record and guarantee.

Self-respect is the noblest garment with which a man may clothe himself—the most elevating feeling with which the mind can be inspired. One of Pythagoras's wisest maxims, in his Golden Verses, is that in which he enjoins the pupil to "reverence himself." Borne up by this high idea, he will not defile his body by sensuality, nor his mind by servile thoughts. This sentiment, carried into daily life, will be found at the root of all the virtues—cleanliness, sobriety, chastity, morality, and religion. "The pious and just honouring of ourselves," said Milton, "may be thought the radical moisture and fountain-head from whence every laudable and worthy enterprise issues forth." To think meanly of one's self, is to sink in one's own estimation as well as in the estimation of others. And as the thoughts are, so will the acts be. A man cannot live a high life who grovels in a moral sewer of his own thoughts. He cannot aspire if he look down; if he will rise, he must look up. The very humblest may be sustained by the proper indulgence of this feeling; and poverty itself may be lifted and lighted up by self-respect. It is truly a noble sight to see a poor man hold himself upright amidst all his temptations, and refuse to demean himself by low actions.

It is not necessary that we should insist on the uses of knowledge as a means of "getting on" in life. This is

already sufficiently taught by obvious self-interest; and it is beginning to be pretty generally understood, that self-culture is one of the best possible investments of time and labour. In any line of life, intelligence will enable a man to adapt himself more readily to circumstances, suggest to him improved methods of work, and render him more apt, skilled, and effective in all respects. He who works with his head as well as his hands, will come to look at his business with a clearer eye; and he will become conscious of increasing power—perhaps the most cheering consciousness the human mind can cherish. The power of self-help will gradually grow; and in proportion to a man's self-respect, will he be armed against the temptation of low indulgences. Society and its action will be regarded with quite a new interest, his sympathies will widen and enlarge, and he will be attracted to work for others as well as for himself.

Self-culture may not, however, end in eminence, such as we have briefly described in the numerous illustrious instances of self-raised individuals above cited. The great majority of men, in all times, however enlightened, must necessarily be engaged in the ordinary avocations of industry; and no degree of culture which can be conferred upon the community will ever enable them—even were it desirable, which it is not—to get rid of the daily work of society, which must be done. But this, we think, may also be accomplished. We can elevate the condition of labour by allying it to noble thoughts, which confer a grace upon the lowliest as well as the highest rank. For no matter how poor or humble a man may be, the great thinker of this and other days may come in and sit down with him, and be his companion for the time, though his dwelling be the meanest hut. It is thus that the habit of well-directed reading may become a source of the greatest pleasure and self-improvement, and exercise a gentle coercion, with the most beneficent results, over the whole tenour of a man's character and conduct. And even though self-culture may not bring wealth, it will at all events give us the good

company of elevated thoughts. A nobleman once contemptuously asked of a sage, "What have you got by all your philosophy?" "At least I have got society in myself," was the wise man's reply.

But many are apt to feel despondency, and to become discouraged in the work of self-culture, because they do not "get on" in the world so fast as they think they deserve to do. Having planted their acorn, they expect to see it grow into an oak at once. They have perhaps looked upon knowledge in the light of a marketable commodity, and are consequently mortified because it does not sell as they expected it would do. Mr. Tremenheere, in one of his 'Education Reports' (for 1840-1) states that a schoolmaster in Norfolk, finding his school rapidly falling off, made inquiry into the cause, and ascertained that the reason given by the majority of the parents for withdrawing their children was, that they had expected "education was to make them better off than they were before," but that having found it had "done them no good," they had therefore taken their children from school, and would give themselves no further trouble about education. The same low idea of self-culture is but too prevalent in other classes, and is encouraged by the false views of life which are always more or less current in society. But to regard self-culture either as a means of getting past others in the world, or of intellectual dissipation and amusement, rather than as a power to elevate the character and expand the spiritual nature, is to place it on a very low level. It is doubtless most honourable for a man to labour to elevate himself, and to better his condition in society, but this is not to be done at the sacrifice of himself. To make the mind the mere drudge of the body, is putting it to a very servile use; and to go about whining and bemoaning our pitiful lot because we fail in achieving that success in life, which after all depends rather upon habits of industry and attention to business details than upon knowledge, is the mark of a small, and

often of a sour mind. Such a temper cannot better be dealt with than in the words of Robert Southey, who thus wrote to a friend who sought his counsel: "I would give you advice if it could be of use; but there is no curing those who choose to be diseased. A good man and a wise man may at times be angry with the world, at times grieved for it; but be sure no man was ever discontented with the world if he did his duty in it. If a man of education, who has health, eyes, hands, and leisure, wants an object, it is only because God Almighty has bestowed all those blessings upon a man who does not deserve them."

It is not improbable that the prominence recently given to literary examinations for small Government offices, of which we have heard so much, may tend to swell the ranks of the discontented, without any corresponding gain to the public service. The plan recently established may be described as a kind of Government lottery, in which the prizes are drawn by those who are the best crammed. Not long since, when eight youths were wanted to do copying work in a public office, no fewer than seven hundred offered themselves for examination; eight prizes to 692 blanks! A most pitiable sight truly, to see so many educated young men eager for the poorly-paid, and routine though "genteel" occupation of a Government office, when there are so many other paths, though requiring labour and self-denial, open for the energies of young men of activity and spirit. Sir James Clarke has not inaptly described the preliminary system of cramming for examination of the kind to which these youths are required to submit as thoroughly demoralizing, and calculated to develop prigs rather than men. The mind is so overlaid with a heap of undigested knowledge, that there is little room left for its free action; and though a functionarism as complete as that already established in China may thereby be secured, it will probably be at the expense of that constitutional energy and vigour, which are so indispensable for attaining a robust manhood. Moreover, the tendency

of this new movement seems to be, to draw the educated youth of the country aside from the paths of ordinary industry, and direct their eyes toward the public treasure as the highest object of their exertions; whilst beyond all, there is that danger to be apprehended, against which Montalembert has so eloquently warned us, of stimulating and propagating the passion for salaries and Government employment, which saps all national spirit of independence, and in some countries makes a whole people a mere crowd of servile solicitors for place.

CHAPTER XI.

FACILITIES AND DIFFICULTIES.

“Is there one whom difficulties dishearten—who bends to the storm? He will do little. Is there one who *will* conquer? That kind of man never fails.”—*John Hunter*.

“C’est des difficultés qui naissent les miracles.”—*Bruyère*.

THIS is an age pre-eminently distinguished for the facilities which it affords for human intercourse and the spread of knowledge. In travelling, telegraphing, printing, and postal communications, it surpasses every other. Tons upon tons of machine-made paper are constantly being converted into machine-printed books and machine-printed newspapers, which are spread abroad at a marvellously low price; and as we look on, we are accustomed to congratulate ourselves upon the marvellous “progress of the age.” If machinery and horse-power of steam could accomplish this, our progress were indeed rapid. But it still remains to be seen whether the vast amount of printed matter in circulation is calculated to produce wiser and better men, actuated by higher and more beneficent principles of action, than existed in England in times comparatively remote, in which books were far rarer but much more highly prized,—such times, for instance, as those for which Shakespeare, Milton, Bacon, and Jeremy Taylor wrote. It will, perhaps, be acknowledged that, though the multiplication of books and newspapers by means of steam engines and printing machines is accompanied by unquestionable advantages, the facilities thereby afforded for the spread of knowledge are not altogether an unmixed good. It doubtless furnishes un-

precedented facilities for learning many things easily and without effort; but at the same time it probably tends rather towards superficialism than depth or vigour of thinking; for while readers are tempted by the multitude of books to skim many subjects, they may thereby be so distracted by the variety, as to be induced to bottom none of them thoroughly.

With all the facilities which exist for independent self-culture, it is even suspected that our life, like our literature, is becoming more mechanical. Large and increasing numbers of persons in our manufacturing districts occupy the chief part of their waking hours from day to day, in watching machines spinning or winding threads, the tendency being to produce a sort of mechanical human beings almost as devoid of individuality of character as the machines they watch. This is one of the defects of modern civilization, daily operating upon large classes of the people, which, in these days, is perhaps too little regarded. While we have been perfecting our mechanisms, we have sometimes forgotten that the finest of all raw material is to be found in Men; and we have not yet done our utmost—indeed we have done comparatively little—to work up and improve that. Speaking of our division of labour processes, Mr. Ruskin has said, “It is not, truly speaking, the labour that is divided, but the men,—divided into mere segments of men,—broken into small fragments and crumbs of life, so that all the little piece of intelligence that is left in a man is not enough to make a pin, or a nail, but exhausts itself in making the point of a pin, or the head of a nail. Now it is a good and desirable thing, truly, to make many pins in a day; but if we could only see with what crystal sand their points were polished, sand of human soul, much to be magnified before it can be discerned for what it is, we should think there would be some loss in it also. And the great cry that rises from all our manufacturing cities, louder than their furnace blast, is all in very deed for this, that we manufacture every-

thing there *except men*; we blanch cotton, and strengthen steel, and refine sugar, and shape pottery; but to brighten, to strengthen, to refine, or to form a single living spirit, never enters into our estimate of advantages."

The popular remedies proposed for existing social and political evils have also a strong mechanical tendency. There is a moral philosophy which proposes to measure our heads with callipers, and then cast up our propensities, moral sentiments, and intellectual faculties, like a sum in addition; thus determining the line of life we are to lead, or the moral hospital we are to be sent to. There are social reformers, who will have us established in parallelograms, and ripened into men by abnegation of all the hopes, struggles, and difficulties, by which men are made. We have logarithms ground out of a box, and calculations manufactured by merely turning a handle, over which men formerly educated their faculties by studying for months. And there are plans afloat for rescuing us from political infamy by the adoption of sundry arithmetical and mechanical expedients, the discussion of which need not here be entered on.

The improved mechanism in our schools also promises to become so perfect that we may, before long, be almost as highly educated as the Chinese, and with quite as impotent a result. The process of filling the memory with facts and formulas got by rote is rapidly extending; but the practice of independent thinking in any but the beaten tracks is not only not taught, but is often carefully prevented. But the facility with which young people are thus made to acquire knowledge, though it may be cramming, is not education. It fills, but does not fructify the mind. It imparts a stimulus for the time, and produces a sort of intellectual keenness and cleverness; but, without an implanted purpose and a higher object than mere knowledge, it will bring with it no solid advantage. The rapidity with which young people now get at a knowledge of many things tends to make them easily satisfied, and

they often become *blasé* at an early age. They may have read many books and gone through many branches of knowledge, but a lamentable indifference possesses them; their souls, without compass, without anchorage, are blown about by all winds; they may understand, but there is little active belief; their minds merely receive ideas with the passiveness of a mirror, and the impressions made are scarcely more permanent. Such persons are determined to no acts, have no desire to form convictions, arrive at no conclusions, and their will seems to be suspended, asleep, diseased, or dead. Knowledge, in cases of this sort, gives but a passing pleasure; a sensation, but no more; it is, in fact, the merest epicurism of intelligence—sensuous, but certainly not intellectual. The best part of such natures, that which is developed by vigorous effort and independent action, sleeps a deep sleep, and is often never called to life, except by the rough awakening of sudden calamity or suffering, which, in such cases, comes as a blessing, if it serves to rouse up a courageous spirit which, but for it, would have slumbered on.

Growing out of the facilities for reading which exist now-a-days, there is also to be observed a sort of mania for “making things pleasant” on the road to knowledge; and hence amusement and excitement are among the most popular methods employed to inculcate knowledge and inspire a taste for reading. Our books and periodicals must be highly spiced, amusing, and interesting. We have already had comic grammars and histories, and we may yet possibly reach the heights of a Comic Euclid and a Comic Prayer-book. Solid subjects are eschewed; and books demanding application and study lie upon bookshelves unread. Douglas Jerrold, in one of his graver moods, once observed of this tendency: “I am convinced the world will get tired (at least I hope so) of this eternal guffaw about all things. After all, life has something serious in it. It cannot be all a comic history of humanity. Some men would, I believe, write a Comic Sermon on the Mount. Think of a Comic

History of England, the drollery of Alfred, the fun of Sir Thomas More, the farce of his daughter begging the dead head and clasping it in her coffin on her bosom. Surely the world will be sick of this blasphemy." Dr. Arnold, speaking of the same evil, once observed :—"Childishness, in boys even of good abilities, seems to me to be a growing fault, and I do not know to what to ascribe it, except to the greater number of exciting books of amusement. These completely satisfy all the intellectual appetites of a boy, which is rarely very voracious, and leave him totally palled, not only for his regular work, which I could well excuse in comparison, but for good literature of all sorts, even for history and poetry." John Sterling also, in a like spirit, said :—"Periodicals and novels are to all in this generation, but more especially to those whose minds are still unformed and in the process of formation, a new and more effectual substitute for the plagues of Egypt, vermin that corrupt the wholesome waters, and infest our chambers."

Accustomed to acquire information under the guise of amusement, young people will soon reject that which is presented to them under the aspect of study and labour. Learning their knowledge and science in sport, they will become apt to make sport of both ; whilst the habit of intellectual dissipation, thus engendered, cannot fail, in course of time, to produce a thoroughly emasculating effect both upon their mind and character. The Novel is the most favourite refuge of the frivolous and the idle. As a rest from toil and a relaxation from graver pursuits, the perusal of a well-written story, by a writer of genius, is a high intellectual pleasure ; and it is a description of literature to which all classes of readers, old and young, are attracted as by a powerful instinct ; nor would we have any of them debarred from its enjoyment in a reasonable degree. But to make it the exclusive literary diet, as some do,—to devour the garbage with which the shelves of circulating libraries are crowded,—and to occupy the greater portion of

the leisure hours in studying the preposterous pictures of human life which so many of them present, is worse than waste of time—it is positively pernicious. The habitual novel-reader indulges in fictitious feelings so much, that there is great risk of sound and healthy feeling becoming perverted or destroyed. For, the literary pity evoked by fiction leads to no corresponding action; the susceptibilities which it excites involve no inconvenience nor self-sacrifice; so that the heart that is touched too often by the fiction may at length become insensible to the reality. The steel is gradually rubbed out of the character, and it insensibly loses its vital spring. As Nero was partial only to the mildest strains of music, so Robespierre's delight was to read stories only of love and endearment, displaying in his life what Montaigne calls "*opinions super-célestes et mœurs souterreines*." "Drawing fine pictures of virtue in one's mind," said Bishop Butler, "is so far from necessarily or certainly conducive to form a *habit* of it in him who thus employs himself, that it may even harden the mind in a contrary course, and render it gradually more insensible."

Amusement in moderation is wholesome, and to be commended; but amusement in excess vitiates the whole nature, and is a thing to be carefully guarded against. The maxim is often quoted of "All work and no play makes Jack a dull boy;" but all play and no work makes him something greatly worse. Nothing can be more hurtful to a youth than to have his soul sodden with pleasure. The best qualities of his mind are thus frittered away; common enjoyments become tasteless; his appetite for the highest kind of pleasures is satiated and exhausted; and when he comes to face the work and the duties of life, the result is often only aversion and disgust. As the child turns from its heap of broken toys, so the *blasé* youth turns from his withered pleasures; and if frivolity have become his habit, he will find that the very capacity for enjoyment has been destroyed within him. "Fast men" soon waste

and exhaust the powers of life, and dry up the very sources of true happiness. They have forestalled their spring, and can produce no healthy growth of either character or intellect. A child without simplicity, a maiden without innocence, a boy without truthfulness, are not more piteous sights than the man who has wasted and thrown away his youth in pleasure. It is amongst such persons especially, whose youth has been sullied by premature enjoyments, that we find that prevalence of scepticism, sneering, and egotism, which prove a soured nature. Having abused the sources of life and thrown away their youth, they are tempted in their despair to throw their manhood after it. Injury of this kind, inflicted on the character, is most difficult to be repaired; for the habits formed in youth bind the man as in chains of adamant. "On ne jette point l'ancre dans le fleuve de la vie," is the happy phrase of an old French writer, in describing that continuity of life in all its parts which inseparably links youth and manhood, and makes the habits of the one more or less the interpreter of the other. So when Lord Bacon says, "Strength of nature in youth passeth over many excesses which are owing a man until he is old," he expresses a physical as well as a moral fact, which cannot be too well weighed in the conduct of early life. What are called wild oats, when sown, very often prove tares in the reaping. Youthful indiscretions soon "find a man out." But the worst of them is, not that they destroy health, so much as that they sully manhood. The dissipated youth becomes a tainted man; and often he cannot be pure, even if he would. If cure there be, it is only to be found in inoculating the mind with a fervent spirit of duty, and in energetic application to useful work.

One of the most gifted of Frenchmen, in point of great intellectual endowments, was Benjamin Constant; but, *blasé* at twenty, his life was only a prolonged wail, instead of a harvest of the great deeds which he was capable of accomplishing with ordinary diligence and self-control. He

resolved upon doing so many things, which he never did, that people came to speak of him as Constant the Inconstant. He was a fluent and brilliant writer, and he cherished the ambition of writing many works "which the world would not willingly let die." But whilst Constant affected the highest thinking, unhappily he practised the lowest living; nor did the lofty transcendentalism of his books by any means palliate the acted meannesses of his life. He daily frequented the gaming-tables while engaged in preparing his work upon religion, and carried on a disreputable intrigue while writing his 'Adolphe.' With all his vast powers of intellect, he was powerless, because he had no faith in virtue. "Bah!" said he, "what are honour and dignity? The longer I live, the more clearly I see there is nothing in them." It was the howl of a miserable man. He described himself as but "ashes and dust." "I pass," said he, "like a shadow over the earth, accompanied by misery and *ennui*." He wished for Voltaire's energy, which he would rather have possessed than his genius. But he had no strength of purpose—nothing but wishes: his life, prematurely exhausted, had become but a heap of broken links. He spoke of himself as a person with one foot in the air. He admitted that he had no principles, and no moral consistency. Hence, with his splendid talents, he contrived to do nothing; and, after living for many years miserable, he died worn out and wretched.

The career of Augustin Thierry, the author of the 'History of the Norman Conquest,' affords an admirable contrast to that of Constant. His entire life presented a striking example of perseverance, diligence, self-culture, and untiring devotion to knowledge. In the pursuit he lost his eyesight, lost his health, but never lost his love of truth. When so feeble that he was carried from room to room, like a helpless infant, in the arms of a nurse, his brave spirit never failed him; and blind and helpless though he was, he concluded his literary career in the following noble words:—"If, as I think, the interest of science is counted

in the number of great national interests, I have given my country all that the soldier, mutilated on the field of battle, gives her. Whatever may be the fate of my labours, this example, I hope, will not be lost. I would wish it to serve to combat the species of moral weakness which is *the disease* of our present generation ; to bring back into the straight road of life some of those enervated souls that complain of wanting faith, that know not what to do, and seek everywhere, without finding it, an object of worship and admiration. Why say, with so much bitterness, that in the world, constituted as it is, there is no air for all lungs—no employment for all minds? Is not calm and serious study there? and is not that a refuge, a hope, a field within the reach of all of us? With it, evil days are passed over without their weight being felt. Every one can make his own destiny—every one employ his life nobly. This is what I have done, and would do again if I had to recommence my career; I would choose that which has brought me where I am. Blind, and suffering without hope, and almost without intermission, I may give this testimony, which from me will not appear suspicious. There is something in the world better than sensual enjoyments, better than fortune, better than health itself—it is devotion to knowledge.”

Coleridge, in many respects, resembled Constant. He possessed equally brilliant powers, but was similarly infirm of purpose. With all his great intellectual gifts, he wanted the gift of industry, and had no liking for steady work. He wanted also the sense of manly independence, and thought it no degradation to leave his wife and children to be maintained by the brain-work of the noble Southey, while he himself retired to Highgate Grove to discourse transcendentalism to his disciples, looking down contemptuously upon the honest work going forward beneath him amidst the din and smoke of London. With remunerative and honourable employment at his command, he preferred stooping to accept the charity of friends; and with the

loftiest ideas of philosophy, he yet condescended to humiliations in his life from which many a day-labourer would have shrunk. How different in spirit was Southey! always an indefatigable worker; labouring not merely at works of his own choice, and at taskwork often tedious and distasteful, but also unremittingly and with the utmost eagerness seeking and storing knowledge purely for the love of it. Every day, every hour had its allotted employment: engagements to publishers requiring punctual fulfilment; the current expenses of a large household (at one time including Coleridge's wife and children) duly to provide for: Southey had no crop growing while his pen was idle. "My ways," he used to say, "are as broad as the king's high-road, and my means lie in an inkstand."

Robert Nicoll wrote to a friend, after reading the 'Recollections of Coleridge,' "What a mighty intellect was lost in that man for want of a little energy—a little determination!" Nicoll himself was a true and brave spirit, cut off in his youth, but not before he had encountered and overcome great difficulties in life. At his outset, while carrying on a small business as a bookseller, he found himself weighed down with a debt of only twenty pounds, which he said he felt "weighing like a millstone round his neck," and that "if he had it paid he never would borrow again from mortal man." Writing to his mother at the time he said, "Fear not for me, dear mother; for I feel myself daily growing firmer and more hopeful in spirit. The more I think and reflect—and thinking, not reading, is now my occupation—I feel that, whether I be growing richer or not, I am growing a wiser man, which is far better. Pain, poverty, and all the other wild beasts of life which so affrighten others, I am so bold as to think I could look in the face without shrinking, without losing respect for myself, faith in man's high destinies, or trust in God. There is a point which it costs much mental toil and struggling to gain, but which, when once gained, a man can look down from, as a traveller from a lofty mountain,

on storms raging below, while he is walking in sunshine. That I have yet gained this point in life I will not say, but I feel myself daily nearer to it."

It is not ease, but effort—not facility, but difficulty, that makes men. There is, perhaps, no station in life, in which difficulties have not to be encountered and overcome before any decided measure of success can be achieved. Those difficulties are, however, our best instructors, as our mistakes often form our best experience. Charles James Fox was accustomed to say that he hoped more from a man who failed, and yet went on in spite of his failure, than from the buoyant career of the successful. "It is all very well," said he, "to tell me that a young man has distinguished himself by a brilliant first speech. He may go on, or he may be satisfied with his first triumph; but show me a young man who has not succeeded at first, and nevertheless has gone on, and I will back that young man to do better than most of those who have succeeded at the first trial."

We learn wisdom from failure much more than from success. We often discover what *will* do, by finding out what will not do; and probably he who never made a mistake, never made a discovery. Horne Tooke used to say of his studies in intellectual philosophy, that he had become all the better acquainted with the country, through having had the good luck sometimes to lose his way. And a distinguished investigator in physical science has left it on record that, whenever in the course of his researches he encountered an apparently insuperable obstacle, he generally found himself on the brink of some novel discovery. The very greatest things—great thoughts, discoveries, inventions—have generally been nurtured in hardship, often pondered over in sorrow, and at length established with difficulty.

Beethoven said of Rossini, that he had in him the stuff to have made a good musician, if he had only, when a boy, been well flogged; but that he had been spoilt by the facility with which he produced. Men who feel their

strength within them need not fear to encounter adverse opinions; they have far greater reason to fear undue praise and too friendly criticism. When Mendelssohn was about to enter the orchestra at Birmingham, on the first performance of his 'Elijah,' he said laughingly to one of his friends and critics, "Stick your claws into me! Don't tell me what you like, but what you don't like!"*

It has been said, and truly, that it is the defeat that tries the general more than the victory. Washington lost far more battles than he gained; but he succeeded in the end. The Romans, in their most victorious campaigns, almost invariably began with defeats. Moreau used to be compared by his companions to a drum, which nobody hears of except it be beaten. Wellington's military genius was perfected by encounter with difficulties of apparently the most overwhelming character, but which only served to nerve his resolution, and bring out more prominently his great qualities as a man and a general. So the skilful mariner obtains his best experience amidst storms and tempests, which train him to self-reliance, courage, and the highest discipline; and we probably owe to rough seas and wintry nights the best training of our race of British seamen, who are certainly not surpassed by any in the world.

Necessity may be a hard schoolmistress; but she is generally found the best. Though the ordeal of adversity is one from which we naturally shrink, yet, when it comes, we must bravely and manfully encounter it. Burns truly says,

"Though losses and crosses
Be lessons right severe,
There's wit there, you'll get there,
You'll find no other where."

"Sweet indeed are the uses of adversity." They reveal to us our powers, and call forth our energies. If there be real worth in the character, like sweet herbs, it will give forth its finest fragrance when pressed. "Crosses," says the

* Athenæum.

old proverb, "are the ladders that lead to heaven." "What is even poverty itself," asks Richter, "that a man should murmur under it? It is but as the pain of piercing a maiden's ear, and you hang precious jewels in the wound." In the experience of life it is found that the wholesome discipline of adversity in strong natures usually carries with it a self-preserving influence. Many are found capable of bravely bearing up under privations, and cheerfully encountering obstructions, who are afterwards found unable to withstand the more dangerous influences of prosperity. It is only a weak man whom the wind deprives of his cloak: a man of average strength is more in danger of losing it when assailed by the beams of a too genial sun. Thus it often needs a higher discipline and a stronger character to bear up under good fortune than under adverse. Some generous natures kindle and warm with prosperity, but there are many on whom wealth has no such influence. Base hearts it only hardens, making those who were mean and servile, mean and proud. But while prosperity is apt to harden the heart to pride, adversity in a man of resolution will only serve to ripen it to fortitude. Too much facility, ease, and prosperity is not good for a man; removing that wholesome stimulus to exertion, which is so essential to sound discipline. On the contrary, to use the words of Burke, "Difficulty is a severe instructor, set over us by the supreme ordinance of a parental guardian and instructor, who knows us better than we know ourselves, as He loves us better too. He that wrestles with us strengthens our nerves, and sharpens our skill: our antagonist is thus our helper." Without the necessity of encountering difficulty, life might be easier, but men would be worth less. For trials, wisely improved, train the character, and teach self-help; thus hardship itself may often prove the wholesomest discipline for us, though we recognise it not. When the gallant young Hodson, unjustly removed from his Indian command, felt himself sore pressed down by unmerited calumny and reproach, he yet preserved the courage to

say to a friend, "I strive to look the worst boldly in the face, as I would an enemy in the field, and to do my appointed work resolutely and to the best of my ability, satisfied that there is a reason for all; and that even irksome duties well done bring their own reward, and that, if not, still they *are* duties."

The battle of life, in by far the greater number of cases, must necessarily be fought up-hill; and to win it without a struggle were perhaps to win it without honour. If there were no difficulties there would be no success; if there were nothing to struggle for, there would be nothing to be achieved. Difficulties may intimidate the weak, but they act only as a wholesome stimulus to men of pluck and resolution. All experience of life indeed serves to prove that the impediments thrown in the way of human advancement, may for the most part be overcome by steady good conduct, honest zeal, activity, perseverance, and above all by a determined resolution to surmount difficulties, and stand up manfully against misfortune.

The school of Difficulty is the best school of moral discipline, for nations as for individuals. Indeed, the history of difficulty would be but a history of all the great and good things that have yet been accomplished by men. It is hard to say how much northern nations owe to their encounter with a comparatively rude and changeable climate and an originally sterile soil, which is one of the necessities of their condition,—involving a perennial struggle with difficulties such as the natives of sunnier climes know nothing of. And thus it may be, that though our finest products are exotic, the skill and industry which have been necessary to rear them, have issued in the production of a native growth of men not surpassed on the globe.

Wherever there is difficulty, the individual man must come out for better for worse. Encounter with it will train his strength, and discipline his skill; heartening him for future effort, as the racer, by being trained to run

against the hill, at length courses with facility. The road to success may be steep to climb, but it puts to the proof the energies of him who would reach the summit. By experience a man soon learns how obstacles are to be overcome by grappling with them—how soft as silk the nettle becomes when it is boldly grasped,—and how powerful a principle of realizing the object proposed, is the moral conviction that we can and will accomplish it. Thus difficulties often fall away of themselves, before the determination to overcome them. In nine cases out of ten, if marched boldly up to they will flee away. Like thieves, they often disappear at a glance. What looked like insuperable obstacles, like some great mountain chain in our way, frowning danger and trial, are found to become practicable when approached, and paths formerly unseen, though they may be narrow and difficult, open a way for us through the hills.

Much will be done if we do but try. Nobody knows what he can do till he has tried; and few try their best till they have been forced to do it. “*If I could do such and such a thing,*” sighs the desponding youth. But he will never *do*, if he only wishes. The desire must ripen into purpose and effort; and one energetic attempt is worth a thousand aspirations. Purposes, like eggs, unless they be hatched into action, will shortly end in decay. It is these thorny “ifs”—the mutterings of impotence and despair—which so often hedge round the field of possibility, and prevent anything being done or even attempted. “A difficulty,” said Lord Lyndhurst, “is a thing to be overcome;” grapple with it at once; facility will come with practice, and strength and fortitude with repeated effort. Thus the mind and character may be trained to an almost perfect discipline, enabling it to move with a grace, spirit, and liberty, almost incomprehensible to those who have not passed through a similar experience.

Everything that we learn is the mastery of a difficulty; and the mastery of one helps us to the mastery of others.

Things which may at first sight appear comparatively valueless in education—such as the study of the dead languages, and the relations of lines and surfaces which we call mathematics—are really of the greatest practical value, not so much because of the information which they yield, as because of the development which they compel. The mastery of these studies evokes effort, and cultivates powers of application, which otherwise might have lain dormant. Thus one thing leads to another, and so the work goes on through life—encounter with difficulty ending only where life or progress ends. But indulging in the feeling of discouragement never helped any one over a difficulty, and never will. D'Alembert's advice to the student who complained to him about his want of success in mastering the first elements of mathematics was the right one—"Go on, sir, and faith and strength will come to you."

Nothing is easy, but was difficult at first—not even so simple an act as walking. The danseuse who turns a pirouette, the violinist who plays a sonata, have acquired their dexterity by patient repetition and after many failures. Carissimi, when praised for the ease and grace of his melodies, exclaimed, "Ah! you little know with what difficulty this ease has been acquired." Sir Joshua Reynolds, when once asked how long it had taken him to paint a certain picture, replied, "All my life." The orator, who pours his flashing thoughts with such apparent ease upon the minds of his hearers, achieves his wonderful power only by means of patient and persevering labour, after much repetition, and, like Disraeli, often after bitter disappointments. Henry Clay, the American orator, when giving advice to young men, thus described to them the secret of his success in the cultivation of his art: "I owe my success in life," said he, "chiefly to one circumstance—that at the age of twenty-seven I commenced, and continued for years, the process of daily reading and speaking upon the contents of some historical or scientific book.

These off-hand efforts were made, sometimes in a corn-field, at others in the forest, and not unfrequently in some distant barn, with the horse and the ox for my auditors. It is to this early practice of the art of all arts that I am indebted for the primary and leading impulses that stimulated me onward, and have shaped and moulded my whole subsequent destiny."

Curran, the Irish orator, when a youth, had a strong defect in his articulation, and at school he was known as "stuttering Jack Curran." While he was engaged in the study of the law, and still struggling to overcome his defect, he was stung into eloquence by the sarcasms of a member of a debating club, who characterised him as "Orator Mum;" for, like Cowper, when he stood up to speak, Curran had not on a previous occasion been able to utter a word. But the taunt raised his pluck; and he replied with a triumphant speech. This accidental discovery in himself of the gift of eloquence encouraged him to proceed in his studies with additional energy and vigour. He corrected his enunciation by reading aloud, emphatically and distinctly, the best passages in our literature, for several hours every day, studying his features before a mirror, and adopting a method of gesticulation suited to his rather awkward and ungraceful figure. He also proposed cases to himself, which he detailed with as much care as if he had been addressing a jury. Curran commenced business with the qualification which Lord Eldon stated to be the first requisite for distinction as a barrister, that is, "to be not worth a shilling." We need not say how Curran's perseverance, energy, and genius, eventually succeeded. When working his way laboriously and painfully at the bar, still oppressed by the diffidence which had overcome him in his debating club, he was on one occasion stung by the Judge (Robinson) into the following masterly retort. In a case under discussion, Mr. Curran observed "that he had never met the law as laid down by his lordship in any book in his library." "That may be, sir," said the judge,

in a contemptuous tone, "but I suspect that *your* library is very small." His lordship was notoriously a furious political partisan, the author of several anonymous pamphlets characterised by unusual violence and dogmatism. Curran, roused by this allusion to his straitened circumstances, replied thus: "It is very true, my lord, that I am poor, and the circumstance has certainly curtailed my library; my books are not numerous, but they are select, and I hope they have been perused with proper dispositions. I have prepared myself for this high profession by the study of a few good works, rather than by the composition of a great many bad ones. I am not ashamed of my poverty; but I should be ashamed of my wealth, could I have stooped to acquire it by servility and corruption. If I rise not to rank, I shall at least be honest; and should I ever cease to be so, many an example shows me that an ill-gained elevation, by making me the more conspicuous, would only make me the more universally and the more notoriously contemptible."

The most highly educated men are those who have been the most resolute in their encounter with difficulties. The extremest poverty has been no obstacle in the way of men devoted to the duty of self-culture. Professor Alexander Murray, the linguist, learnt to write by scribbling his letters on an old wool-card with the end of a burnt heather stem. The only book which his father, who was a poor shepherd, possessed, was a penny Shorter Catechism; but that, being thought too valuable for common use, was carefully preserved in a cupboard for the Sunday catechisings. Professor Moor, when a young man, being too poor to purchase Newton's 'Principia,' borrowed the book, and copied the whole of it with his own hand. Many poor students, while labouring daily for their living, have only been able to snatch an atom of knowledge here and there at intervals, as birds do their food in winter time when the fields are covered with snow. They have struggled on, and faith and hope have come to them. A well-known author and

publisher, William Chambers, of Edinburgh, speaking before an assemblage of young men in that city, thus briefly described to them his humble beginnings, for their encouragement: "I stand before you," he said, "a self-educated man. My education was that which is supplied at the humble parish schools of Scotland; and it was only when I went to Edinburgh, a poor boy, that I devoted my evenings, after the labours of the day, to the cultivation of that intellect which the Almighty has given me. From seven or eight in the morning till nine or ten at night, was I at my business as a bookseller's apprentice, and it was only during hours after these, stolen from sleep, that I could devote myself to study. I assure you that I did not read novels; my attention was devoted to physical science, and other useful matters. During that period I taught myself French. I look back to those times with great pleasure, and am almost sorry I have not to go through the same troubles again. I reaped more pleasure when I had not a sixpence in my pocket, studying in a garret in Edinburgh, than I now find when sitting amidst all the elegancies and comforts of a parlour."

William Cobbett has himself told the interesting story of how he learnt English Grammar, and, as a curious illustration of that brave man's pluck in grappling with a difficulty, we cannot do better than quote it here. "I learned grammar," he said, "when I was a private soldier on the pay of sixpence a day. The edge of my berth, or that of my guard-bed, was my seat to study in; my knapsack was my book-case; a bit of board lying on my lap was my writing-table; and the task did not demand anything like a year of my life. I had no money to purchase candle or oil; in winter time it was rarely that I could get any evening light but that of the fire, and only my turn even of that. And if I, under such circumstances, and without parent or friend to advise or encourage me, accomplished this undertaking, what excuse can there be for any youth, however poor, however pressed with business, or however

circumstanced as to room or other conveniences? To buy a pen or a sheet of paper I was compelled to forego some portion of food, though in a state of half-starvation: I had no moment of time that I could call my own; and I had to read and to write amidst the talking, laughing, singing, whistling, and brawling of at least half a score of the most thoughtless of men, and that, too, in the hours of their freedom from all control. Think not lightly of the farthing that I had to give, now and then, for ink, pen, or paper! That farthing was, alas! a great sum to me! I was as tall as I am now; I had great health and great exercise. The whole of the money, not expended for us at market, was two-pence a week for each man. I remember, and well I may! that on one occasion I, after all necessary expenses, had, on a Friday, made shifts to have a halfpenny in reserve, which I had destined for the purchase of a red-herring in the morning; but, when I pulled off my clothes at night, so hungry then as to be hardly able to endure life, I found that I had lost my halfpenny! I buried my head under the miserable sheet and rug, and cried like a child! And again I say, if I, under circumstances like these, could encounter and overcome this task, is there, can there be, in the whole world, a youth to find an excuse for the non-performance?"

A very different man was Sir Samuel Romilly, but not less indefatigable as a diligent self-cultivator. He was the son of a jeweller, descended from a French refugee; he received little education in his early years, but overcame all his disadvantages by unwearied application, and by efforts constantly directed towards the same end. "I determined," he says, in his autobiography, "when I was between fifteen and sixteen years of age, to apply myself seriously to learning Latin, of which I, at that time, knew little more than some of the most familiar rules of grammar. In the course of three or four years, during which I thus applied myself, I had read almost every prose writer of the age of pure Latinity, except those who have treated merely

of technical subjects, such as Varro, Columella, and Celsus. I had gone three times through the whole of Livy, Sallust, and Tacitus. I had studied the most celebrated orations of Cicero, and translated a great deal of Homer. Terence, Virgil, Horace, Ovid, and Juvenal, I had read over and over again." He also studied geography, natural history, and natural philosophy, and obtained a considerable acquaintance with general knowledge. At sixteen he was articled to a clerk in Chancery; worked hard; was admitted to the bar; and his industry and perseverance ensured success. He became Solicitor-General under the Fox administration in 1806, and steadily worked his way to the highest celebrity in his profession. Yet he was always haunted by a painful and almost oppressive sense of his own disqualifications, and never ceased labouring to remedy them. His autobiography is a lesson of instructive facts, worth volumes of sentiment, and is well deserving of a careful perusal.

Sir Walter Scott was accustomed to cite the case of his young friend John Leyden as one of the most remarkable illustrations of the power of perseverance which he had ever known. The son of a shepherd in one of the wildest valleys of Roxburghshire, he was almost entirely self-educated. Like many Scotch shepherds' sons—like Hogg, who taught himself to write by copying the letters of a printed book as he lay watching his flock on the hill-side—like Cairns, who from tending sheep on the Lammermoors, raised himself by dint of application and industry to the professor's chair which he now so worthily holds—like Murray, Ferguson, and many more, Leyden was early inspired by a thirst for knowledge. When a poor barefooted boy, he walked six or eight miles across the moors daily to learn reading at the little village schoolhouse of Kirkton; and this was all the education he received; the rest he acquired for himself. He found his way to Edinburgh to attend the college there, setting the extremest penury at utter defiance. He was first discovered as a

frequenter of a small bookseller's shop kept by Archibald Constable, afterwards so well known as a publisher. He would pass hour after hour perched on a ladder in mid-air, with some great folio in his hand, forgetful of the scanty meal of bread and water which awaited him at his miserable lodging. Access to books and lectures comprised all within the bounds of his wishes. Thus he toiled and battled at the gates of science until his unconquerable perseverance carried everything before it. Before he had attained his nineteenth year he had astonished all the professors in Edinburgh by his profound knowledge of Greek and Latin, and the general mass of information he had acquired. Having turned his views to India, he sought employment in the civil service, but failed. He was however informed that a surgeon's assistant's commission was open to him. But he was no surgeon, and knew no more of the profession than a child. He could however learn. Then he was told that he must be ready to pass in six months! Nothing daunted, he set to work, to acquire in six months what usually requires three years. At the end of six months he took his degree with honour. Scott and a few friends helped to fit him out; and he sailed for India, after publishing his beautiful poem 'The Scenes of Infancy. In India he promised to become one of the greatest of oriental scholars, but unhappily he was cut off by fever caught by exposure, and died at an early age.

But perhaps the life of the late Dr. Lee, Professor of Hebrew, at Cambridge, furnishes one of the most remarkable instances in modern times, of the power of perseverance and resolute purpose in working out an honourable career in literature. He received his education at a charity school at Lognor, near Shrewsbury, but so little distinguished himself there, that his master pronounced him to be one of the dullest boys that ever passed through his hands. He was put apprentice to a carpenter, and worked at that trade until he arrived at manhood. To occupy his leisure hours he took to reading; and, some of the books

containing Latin quotations, he became desirous of ascertaining what they meant. He bought a Latin grammar, and proceeded to learn Latin. As Stone, the Duke of Argyll's gardener, said, long before, "Does one need to know anything more than the twenty-four letters, in order to learn everything else that one wishes?" Lee rose early and sat up late, and he succeeded in mastering the Latin before his apprenticeship was out. Whilst working one day in some place of worship, a copy of a Greek Testament fell in his way, and he was immediately filled with the desire to learn this language too. He accordingly sold some of his Latin books, and purchased a Greek Grammar and Lexicon. He took pleasure in learning, and he soon learnt the language. Then he sold his Greek books, and bought Hebrew ones, and learnt that language, unassisted by any instructor, without any hope of fame or reward, but simply following the bent of his genius. He next proceeded to master the Chaldee, Syriac, and Samaritan dialects. But his studies began to tell upon his health, and brought on disease in his eyes through his long night watchings with his books. Having laid them aside for a time and recovered his health, he went on with his daily work. His character as a tradesman being excellent, his business improved, and his means enabled him to marry, which he did when twenty-eight years old. He determined now to devote himself to the maintenance of his family, and to renounce his luxury of book learning; accordingly he sold all his books. He might have continued a working carpenter all his life, had not the chest of tools upon which he depended for subsistence been consumed by fire, and destitution stared him in the face. He was too poor to buy new tools, so he bethought him of teaching children their letters; a profession requiring the least possible capital. But though he had mastered many languages, he was so defective in the common branches of knowledge, that at first he could not teach them. Resolute of purpose, however, he assiduously set to work, and taught himself arithmetic and

writing to such an extent as to be able to impart the knowledge of these branches to little children. His unaffected, simple, and beautiful character gradually attracted friends, and the acquirements of the "learned carpenter" became bruited abroad. Dr. Scott, a neighbouring clergyman, obtained for him the appointment of master of a charity school in Shrewsbury, and introduced him to a distinguished Oriental scholar. These friends supplied him with books, and Lee successively mastered the Arabic, Persic, and Hindostanee languages. He continued to pursue his studies while on permanent duty in the local militia of the county; gradually acquiring greater proficiency in languages. At length his kind patron, Dr. Scott, enabled him to enter Queen's College, Cambridge; and after a course of study, in which he distinguished himself by his mathematical acquirements, a vacancy occurring in the professorship of Arabic and Hebrew, he was worthily elected to fill the honourable office. Besides ably performing his duties as a professor, he voluntarily gave much of his time to the instruction of missionaries going forth to preach the Gospel to eastern tribes in their own tongue. He also made translations of the Bible in several Asiatic dialects; and having mastered the New Zealand tongue, he arranged a Grammar and Vocabulary for two New Zealand Chiefs who were then in England, which books are now in daily use in the New Zealand schools. Such, in brief, is the remarkable history of Dr. Samuel Lee; and it is but the counterpart of many similarly instructive examples of the power of perseverance in self-culture, as displayed in the lives of many of the most distinguished of our literary and scientific men.*

There are many more illustrious names which might be cited to prove the truth of the common saying that "it is never too late to learn." Even at advanced years men can do much, if they will determine on making a beginning. Sir Henry Spelman did not begin the study of science

* See the admirable and well-known book 'The Pursuit of Knowledge under Difficulties.'

until he was between fifty and sixty years of age. Franklin was fifty before he fully entered upon the study of Natural Philosophy. Dryden and Scott were not known as authors until each was in his fortieth year. Boccaccio was thirty-five when he entered upon his literary career, and Alfieri was forty-six when he commenced the study of Greek. Dr. Arnold learnt German at an advanced age, for the purpose of reading Niebuhr in the original; and in like manner James Watt, when about forty, while working at his trade of an instrument maker in Glasgow, learnt French, German, and Italian, to enable himself to peruse the valuable works on mechanical philosophy in these languages. Robert Hall was once found lying upon the floor, racked by pain, learning Italian in his old age, to enable him to judge of the parallel drawn by Macaulay between Milton and Dante. Handel was forty-eight before he published any of his great works. Indeed hundreds of instances might be given of men who struck out an entirely new path, and successfully entered on new studies, at a comparatively advanced time of life. None but the frivolous or the indolent will say, "I am too old to learn."

And here we would repeat what we have said before, that it is not men of genius who move the world, and take the lead in it, but men of steadfastness, purpose, and indefatigable industry. Notwithstanding the many curious stories which have been told about the infancy of men of genius, it is nevertheless true that early cleverness is no test whatever of the height to which the grown man will reach. Precocity is quite as often a symptom of disease as an indication of intellectual vigour in youth. What becomes of all the "remarkably clever children"? Where are all the duxes and prize boys? Trace them through life, and it will often be found that the dull boys, who were invariably beaten at school, have shot ahead of them. The clever boys are rewarded, but the prizes which they gain by their greater quickness and facility rarely prove of

service to them. What ought rather to be rewarded is, the endeavour, the struggle, and the obedience; for it is the youth who does his best though endowed with an inferiority of natural powers, that ought above all others to be encouraged.

An interesting chapter might be written on the subject of illustrious dunces—dull boys, but brilliant men. We have room, however, for only a few instances. Pietro di Cortona, the painter, was thought so stupid that he was nicknamed “Ass’s Head” when a boy; and Tomaso Guidi was generally known as “Heavy Tom” (Massaccio Tomasaccio), though by diligence he afterwards raised himself to the highest eminence. Newton, when at school, stood at the bottom of the lowermost form but one. The boy above Newton having kicked him, the dunce showed his pluck by challenging him to a fight, and beat him. Then he set to work with a will, and determined also to vanquish his antagonist as a scholar, which he did, rising to the top of his class. Many of our greatest divines have been anything but precocious. Isaac Barrow, when a boy at the Charterhouse school, was notorious chiefly for his strong temper, pugnacious habits, and proverbial idleness as a scholar; and he caused such grief to his parents, that his father used to say that, if it pleased God to take from him any of his children, he hoped it might be Isaac, the least promising of them all. Adam Clarke, when a boy, was proclaimed by his father to be “a grievous dunce;” though he could roll large stones about. Dean Swift, one of the greatest writers of pure English, was “plucked” at Dublin University, and only obtained his recommendation to Oxford “speciali gratia.” The well-known Dr. Chalmers and Dr. Cook* were boys together at the parish school of St. Andrew’s; and they were found so stupid and mischievous, that the master, irritated beyond measure, dismissed them both as incorrigible dunces.

The brilliant Sheridan showed so little capacity as a

* Late Professor of Moral Philosophy at St. Andrew’s.

boy, that he was presented to a tutor by his mother with the complimentary accompaniment, that he was an incorrigible dunce. Walter Scott was all but a dunce when a boy, always much readier for a "bicker," than apt at his lessons. At the Edinburgh University, Professor Dalzell pronounced upon him the sentence that "Dunce he was, and dunce he would remain." Chatterton was returned on his mother's hands as "a fool, of whom nothing could be made." Burns was a dull boy, good only at athletic exercises. Goldsmith spoke of himself as a plant that flowered late. Alfieri left college no wiser than he entered it, and did not begin the studies by which he distinguished himself, until he had run half over Europe. Robert Clive was a dunce, if not a reprobate, when a youth; but always full of energy, even in badness. His family, glad to get rid of him, shipped him off to Madras; and he lived to lay the foundations of the British power in India. Napoleon and Wellington were both dull boys, not distinguishing themselves in any way at school.* Of the former the Duchess d'Abrantes says, "he had good health, but was in other respects like other boys." John Howard, the Philanthropist, was another illustrious dunce, learning next to nothing during the seven years that he was at school. Stephenson, as a youth, was distinguished chiefly for his skill at putting and wrestling, and attention to his work. The brilliant Sir Humphry Davy was no cleverer than other boys: his teacher, Dr. Cardew, once said of him, "While he was with me, I could not discern the faculties by which he was so much distinguished." Indeed, he himself in after life considered it fortunate that he had been left to "enjoy so much idleness" at school. Watt was a dull scholar, notwithstanding the pretty stories told about

* A writer in the 'Edinburgh Review' (July, 1859) observes that "the Duke's talents seem never to have developed themselves until some active and practical field for their display was placed immediately before him. He was long described by his Spartan mother, who thought him a dunce, as only 'food for powder.' He gained no sort of distinction, either at Eton or at the French Military College of Angers." It is not improbable that a competitive examination at this day, might have excluded him from the army.

his precocity; but he was, what was better, patient and perseverant, and it was by that means, and by his carefully cultivated inventiveness, that he was enabled to perfect his steam-engine.

What Dr. Arnold said of boys is equally true of men—that the difference between one boy and another consists not so much in talent as in energy. Given perseverance, and energy soon becomes habitual. Provided the dunce has persistency and application, he will inevitably head the cleverer fellow without these qualities. Slow but sure wins the race. It is perseverance that explains how the position of boys at school is so often reversed in real life; and it is curious to note how some who were then so clever have since become so commonplace; whilst others, dull boys, of whom nothing was expected, slow in their faculties but sure in their pace, have assumed the position of leaders of men. The author of this book, when a boy, stood in the same class with one of the greatest of dunces. One teacher after another had tried his skill upon him and failed. Corporal punishment, the fool's cap, coaxing, and earnest entreaty, proved alike fruitless. Sometimes the experiment was tried of putting him at the top of his class, and it was curious to note the rapidity with which he gravitated to the inevitable bottom, like a lump of lead passing through quicksilver. The youth was given up by many teachers as an incorrigible dunce—one of them pronouncing him to be a “stupendous booby.” Yet, slow though he was, this dunce had a sort of dull energy of purpose in him, which grew with his muscles and his manhood; and, strange to say, when he at length came to take part in the practical business of life, he was found heading most of his school companions, and eventually left the greater number of them far behind. The last time the author heard of him, he was chief magistrate of his native town. The tortoise in the right road will beat a racer in the wrong. It matters not though a youth be slow, if he be but diligent. Quickness of parts may even prove a

defect, inasmuch as the boy who learns readily will often forget quite as readily; and also because he finds no need of cultivating that quality of application and perseverance which the slower youth is compelled to exercise, and which proves so valuable an element in the formation of every character. Davy said, "What I am I have made myself;" and the same holds true universally.

The highest culture is not obtained from teachers when at school or college, so much as by our own diligent self-education when we have become men. Hence parents need not be in too great haste to see their children's talents forced into bloom. Let them watch and wait patiently, letting good example and quiet training do their work, and leave the rest to Providence. Let them see to it that the youth is provided, by free exercise of his bodily powers, with a full stock of physical health; set him fairly on the road of self-culture; carefully train his habits of application and perseverance; and as he grows older, if the right stuff be in him, he will be enabled vigorously and effectively to cultivate himself.

CHAPTER XII.

EXAMPLE—MODELS.

“ Ever their phantoms rise before us,
Our loftier brothers, but one in blood;
By bed and table they lord it o’er us,
With looks of beauty and words of good.”—*John Sterling*.

“ There is no action of man in this life, which is not the beginning of so long a chain of consequences, as that no human providence is high enough to give us a prospect to the end.”—*Thomas of Malmesbury*.

EXAMPLE is one of the most potent of instructors, though it teaches without a tongue. It is the practical school of mankind, working by action, which is always more forcible than words. Precept may point to us the way, but it is silent continuous example, conveyed to us by habits, and living with us in fact, that carries us along. Good advice has its weight: but without the accompaniment of a good example, it is of comparatively small influence; and it will be found that the common saying of “Do as I say, not as I do,” is usually reversed in the actual experience of life.

All persons are more or less apt to learn through the eye, rather than the ear; and, whatever is seen in fact, makes a far deeper impression than anything that is read or heard. This is especially the case in early youth, when the eye is the chief inlet of knowledge. Whatever children see, they unconsciously imitate; and they insensibly become like to those who are about them—like insects which take the colour of the leaves they feed on. Hence the vast

importance of domestic training. For whatever may be the efficiency of our schools, the examples set in our Homes must always be of vastly greater influence in forming the characters of our future men and women. The Home is the crystal of society—the very nucleus of national character; and from that source, be it pure or tainted, issue the habits, principles, and maxims, which govern public as well as private life. The nation comes from the nursery; public opinion itself is for the most part the outgrowth of the home; and the best philanthropy comes from the fireside. “To love the little platoon we belong to in society,” says Burke, “is the germ of all public affections.” From this little central spot, the human sympathies may extend in an ever widening circle, until the world is embraced; for, though true philanthropy, like charity, begins at home, assuredly it does not end there.

Example in conduct, therefore, even in apparently trivial matters, is of no light moment, inasmuch as it is constantly becoming inwoven with the lives of others, and contributing to form their characters for better or for worse. The characters of parents are thus constantly repeated in their children; and the acts of affection, discipline, industry, and self-control, which they daily exemplify, live and act when all else which they may have learned through the ear has long been forgotten. Even the mute action and unconscious look of a parent may give a stamp to the character which is never effaced; and who can tell how much evil act has been stayed by the thought of some good parent, whose memory their children may not sully by the commission of an unworthy deed, or the indulgence of an impure thought? The veriest trifles thus become of importance in influencing the characters of men. “A kiss from my mother,” said West, “made me a painter.” It is on the direction of such seeming trifles when children, that the future happiness and success of men mainly depend. Fowell Buxton, when occupying an eminent and influential station in life, wrote to his mother, “I constantly feel,

especially in action and exertion for others, the effects of principles early implanted by you in my mind." Buxton was also accustomed to remember with gratitude the obligations which he owed to an illiterate man, a game-keeper, named Abraham Plastow, with whom he played, and rode, and sported—a man who could neither read nor write, but was full of natural good sense and mother-wit.

What made him particularly valuable," says Buxton, "were his principles of integrity and honour. He never said or did a thing in the absence of my mother of which she would have disapproved. He always held up the highest standard of integrity, and filled our youthful minds with sentiments as pure and as generous as could be found in the writings of Seneca or Cicero. Such was my first instructor, and, I must add, my best."

Lord Langdale, looking back upon the admirable example set him by his mother, declared, "If the whole world were put into one scale, and my mother into the other, the world would kick the beam." Mrs. SchimmelPenninck, in her old age, was accustomed to call to mind the personal influence exercised by her mother upon the society amidst which she moved. When she entered a room, it had the effect of immediately raising the tone of the conversation, and as if purifying the moral atmosphere—all seeming to breathe more freely, and stand more erectly. "In her presence," says the daughter, "I became for the time transformed into another person." So much does the moral health depend upon the moral atmosphere that is breathed, and so great is the influence daily exercised by parents over their children by living a life before their eyes, that perhaps the best system of parental instruction might be summed up in these two words: "Improve thyself."

There is something solemn and awful in the thought that there is not an act nor thought in the life of a human being but carries with it a train of consequences, the end of which we may never trace. Not one but, to a certain extent, gives a colour to our own life, and insensibly in-

fluences the lives of those about us. The good deed or thought will live, even though we may not see it fructify, but so will the bad ; and no person is so insignificant as to be sure that his example will not do good on the one hand, nor evil on the other. There is, indeed, an essence of immortality in the life of man, even in this world. No individual in the universe stands alone ; he is a component part of a system of mutual dependencies ; and by his several acts he either increases or diminishes the sum of human good now and for ever. As the present is rooted in the past, and the lives and examples of our forefathers still to a great extent influence us, so are we by our daily acts contributing to form the condition and character of the future. The living man is a fruit formed and ripened by the culture of all the foregoing centuries. Generations six thousand years deep stand behind us, each laying its hands upon its successor's shoulders, and the living generation continues the magnetic current of action and example destined to bind the remotest past with the most distant future. No man's acts die utterly ; and though his body may resolve into dust and air, his good or his bad deeds will still be bringing forth fruit after their kind, and influencing generations of men for all time to come. It is in this momentous and solemn fact that the great peril and responsibility of human existence lies.

Mr. Babbage has so powerfully expressed this idea in a noble passage in one of his writings, that we here venture to quote his words : "Every atom," he says, "impressed with good or ill, retains at once the motions which philosophers and sages have imparted to it, mixed and combined in ten thousand ways with all that is worthless and base ; the air itself is one vast library, on whose pages are written *for ever* all that man has ever said or whispered. There, in their immutable but unerring characters, mixed with the earliest as well as the latest sighs of mortality, stand for ever recorded vows unredeemed, promises unfulfilled ; perpetuating, in the united movements of each particle,

the testimony of man's changeful will. But, if the air we breathe is the never-failing historian of the sentiments we have uttered, earth, air, and ocean, are, in like manner, the eternal witnesses of the acts we have done; the same principle of the equality of action and reaction applies to them. No motion impressed by natural causes, or by human agency, is ever obliterated. . . . If the Almighty stamped on the brow of the first murderer the indelible and visible mark of his guilt, He has also established laws by which every succeeding criminal is not less irrevocably chained to the testimony of his crime; for every atom of his mortal frame, through whatever changes its severed particles may migrate, will still retain adhering to it, through every combination, some movement derived from that very muscular effort by which the crime itself was perpetrated."

Thus, every act we do or word we utter, as well as every act we witness or word we hear, carries with it an influence which extends over, and gives a colour, not only to the whole of our future life, but makes itself felt upon the whole frame of society. We may not, and indeed cannot possibly trace the influence working itself into action in its various ramifications amongst our children, our friends, or associates; yet there it is assuredly, working on for ever. And herein lies the great significance of setting forth a good example,—a silent teaching which even the poorest and least significant person can enforce by his daily life. There is no one so humble, but that he owes to others this simple but priceless instruction. Even the meanest condition may thus be made useful; for the light set in a low place shines as faithfully as that set upon a hill. Everywhere, and under almost all circumstances, however externally adverse—in moorland shielings, in cottage hamlets, in the close alleys of great towns—the true man may grow. He who tills a space of earth scarce bigger than is needed for his grave, may work as faithfully, and to as good purpose, as the heir to

thousands. The commonest workshop may thus be a school of industry, science, and good morals, on the one hand ; or of idleness, folly, and depravity, on the other. It all depends on the individual men, and the use they make of the opportunities for good which offer themselves.

A life well spent, a character uprightly sustained, is no slight legacy to leave to one's children, and to the world ; for it is the most eloquent lesson of virtue and the severest reproof of vice, while it continues an enduring source of the best kind of riches. Well for those who can say, as Pope did, in rejoinder to the sarcasms of Lord Hervey, "I think it enough that my parents, such as they were, never cost me a blush, and that their son, such as he is, never cost them a tear."

It is not enough to *tell* others what they are to do, but to exhibit the actual example of doing. What Mrs. Chisholm described to Mrs. Stowe as the secret of her success, applies to all life. "I found," she said, "that if we want anything *done*, we must go to work and *do* : it is of no use merely to talk—none whatever." It is poor eloquence that only shows how a person can talk. Had Mrs. Chisholm gone about lecturing, her project, she was persuaded, would never have got beyond the region of talk ; but when people saw what she was doing and had actually accomplished, they fell in with her views and came forward to help her. Hence the most beneficent worker is not he who says the most eloquent things, or even who thinks the most loftily, but he who does the most eloquent acts.

True-hearted persons, even in the humblest station in life, who are energetic doers, may thus give an impulse to good works out of all proportion, apparently, to their actual station in society. Thomas Wright might have talked about the reclamation of criminals, and John Pounds about the necessity for Ragged Schools, and yet have done nothing ; instead of which they simply set to work without any other idea in their minds than that of doing, not talking. And how the example of even the poorest man may

tell upon society, hear what Dr. Guthrie, the apostle of the Ragged School movement, says of the influence which the example of John Pounds, the humble Portsmouth cobbler, exercised upon his own working career:—

“The interest I have been led to take in this cause is an example of how, in Providence, a man’s destiny—his course of life, like that of a river—may be determined and affected by very trivial circumstances. It is rather curious—at least it is interesting to me to remember—that it was by a picture I was first led to take an interest in ragged schools—by a picture in an old, obscure, decaying burgh that stands on the shores of the Frith of Forth, the birthplace of Thomas Chalmers. I went to see this place many years ago, and, going into an inn for refreshment, I found the room covered with pictures of shepherdesses with their crooks, and sailors in holiday attire, not particularly interesting. But above the chimney-piece there was a large print, more respectable than its neighbours, which represented a cobbler’s room. The cobbler was there himself, spectacles on nose, an old shoe between his knees—the massive forehead and firm mouth indicating great determination of character, and, beneath his bushy eyebrows, benevolence gleamed out on a number of poor ragged boys and girls who stood at their lessons round the busy cobbler. My curiosity was awakened; and in the inscription I read how this man, John Pounds, a cobbler in Portsmouth, taking pity on the multitude of poor ragged children left by ministers and magistrates, and ladies and gentlemen, to go to ruin on the streets—how, like a good shepherd, he gathered in these wretched outcasts—how he had trained them to God and to the world—and how, while earning his daily bread by the sweat of his brow, he had rescued from misery and saved to society not less than five hundred of these children. I felt ashamed of myself. I felt reprovèd for the little I had done. My feelings were touched. I was astonished at this man’s achievements; and I well remember, in the enthusiasm of the moment, saying to my

companion (and I have seen in my cooler and calmer moments no reason for unsaying the saying)—‘That man is an honour to humanity, and deserves the tallest monument ever raised within the shores of Britain.’ I took up that man’s history, and I found it animated by the spirit of Him who had ‘compassion on the multitude.’ John Pounds was a clever man besides; and, like Paul, if he could not win a poor boy any other way, he won him by art. He would be seen chasing a ragged boy along the quays, and compelling him to come to school, not by the power of a policeman, but by the power of a hot potato. He knew the love an Irishman had for a potato; and John Pounds might be seen running holding under the boy’s nose a potato, like an Irishman, very hot, and with a coat as ragged as himself. When the day comes when honour will be done to whom honour is due, I can fancy the crowd of those whose fame poets have sung, and to whose memory monuments have been raised, dividing like the wave, and, passing the great, and the noble, and the mighty of the land, this poor, obscure old man stepping forward and receiving the especial notice of Him who said, ‘Inasmuch as ye did it to one of the least of these, ye did it also to Me.’

We never can tell where a good example may fall, or in what direction it may operate. Even the sight of patient uncomplaining industry on the part of weak and humble persons—working on and trying to do their best in the position of life in which Providence has placed them—may be of service to many a worker with higher ends. We have heard of a young surgeon in a country place, engaged in the up-hill work of establishing a practice, who began to feel as if he must sink under it in despair. But once, when visiting a patient, he took occasion to remark how often he had seen certain lights in an opposite window, very late at night. He was told that the room with the lights was occupied by two girls, dressmakers, who had been reduced to great distress by their father’s misconduct; “and now,”

said the informant, "they are working day and night to make their way against misfortune *as well as they can.*" The young surgeon took the words home with him, and when he felt disposed to complain of the world, the thought of these hardworking girls invigorated and cheered him; and by giving him new courage, just as he was sinking, their example, he used afterwards to say, proved invaluable to him.

The education of character is very much a question of models; we mould ourselves so unconsciously after the characters, manners, habits, and opinions of those who are about us. Good rules may do much, but good models far more; for in the latter we have instruction in action—wisdom at work. Good admonition and bad example only build with one hand to pull down with the other. Hence the vast importance of exercising great care in the selection of companions, especially in youth. There is a magnetic affinity in young persons which insensibly tends to assimilate them to each other's likeness. Mr. Edgworth was so strongly convinced that from sympathy they involuntarily imitated or caught the tone of the company they frequented, that he held it to be of the most essential importance that they should be taught to select the very best models. "No company, or good company," was his motto. Lord Collingwood, writing to a young friend, said, "Hold it as a maxim that you had better be alone than in mean company. Let your companions be such as yourself, or superior; for the worth of a man will always be ruled by that of his company." As Sir Peter Lely made it a rule never to look at a bad picture if he could help it, believing that whenever he did so his pencil caught a taint from it, so, whoever chooses to gaze often upon a debased specimen of humanity and to frequent his society, cannot help gradually assimilating himself to that sort of model.

It is therefore advisable for young men to seek the fellowship of the good, and always to aim at a higher

standard than themselves. Francis Horner, speaking of the advantages to himself of direct personal intercourse with high-minded, intelligent men, said, "I cannot hesitate to decide that I have derived more intellectual improvement from them than from all the books I have turned over." Lord Shelburne (afterwards Marquis of Lansdowne), when a young man, paid a visit to the venerable Malesherbes, and was so much impressed by it, that he said,—"I have travelled much, but I have never been so influenced by personal contact with any man; and if I ever accomplish any good in the course of my life, I am certain that the recollection of M. de Malesherbes will animate my soul." So Fowell Buxton was always ready to acknowledge the powerful influence exercised upon the formation of his character in early life by the example of the Gurney family: "It has given a colour to my life," he used to say. Speaking of his success at the Dublin University, he confessed, "I can ascribe it to nothing but my Earlham visits." It was from the Gurneys he "caught the infection" of self-improvement.

Contact with the good never fails to impart good, and we carry away with us some of the blessing, as travellers' garments retain the odour of the flowers and shrubs through which they have passed. Those who knew the late John Sterling intimately have spoken of the beneficial influence which he exercised on all with whom he came into personal contact. Many owed to him their first awakening to a higher being; from him they learnt what they were, and what they ought to be. Mr. Trench says of him:—"It was impossible to come in contact with his noble nature without feeling one's self in some measure *ennobled* and *lifted up*, as I ever felt when I left him, into a higher region of objects and aims than that in which one is tempted habitually to dwell." It is thus that the noble character always acts; we become lifted and lighted up in him—we cannot help being borne along by him and acquiring the habit of looking at things in the same light: such

is the magical action and reaction of minds upon each other.

Artists, also, feel themselves elevated by contact with artists greater than themselves. Thus Haydn's genius was first fired by Handel. Hearing him play, his ardour for musical composition was at once excited, and but for the circumstance, Haydn himself believed that he would never have written the 'Creation.' Speaking of Handel, he said, "When he chooses, he strikes like the thunderbolt;" and at another time, "There is not a note of him but draws blood." Scarlatti was another of Handel's ardent admirers, following him all over Italy; afterwards, when speaking of the great master, he would cross himself in token of admiration. True artists never fail generously to recognise each other's greatness. Thus Beethoven's admiration for Cherubini was regal; and he ardently hailed the genius of Schubert: "Truly," said he, "in Schubert dwells a divine fire." When Northcote was a mere youth he had such an admiration for Reynolds that, when the great painter was once attending a public meeting down in Devonshire, the boy pushed through the crowd, and got so near Reynolds as to touch the skirt of his coat, "which I did," says Northcote, "with great satisfaction to my mind,"—a true touch of youthful enthusiasm in its admiration of genius.

The example of the brave is an inspiration to the timid, their presence thrilling through every fibre. Hence the miracles of valour so often performed by ordinary men under the leadership of the heroic. The very recollection of the deeds of the valiant stirs men's blood like the sound of a trumpet. Ziska bequeathed his skin to be used as a drum to inspire the valour of the Bohemians. When Scanderbeg, prince of Epirus, was dead, the Turks wished to possess his bones, that each might wear a piece next his heart, hoping thus to secure some portion of the courage he had displayed while living, and which they had so often experienced in battle. When the gallant Douglas, bearing the heart

of Bruce to the Holy Land, saw one of his knights surrounded and sorely pressed by the Saracens in battle, he took from his neck the silver case containing the hero's bequest, and throwing it amidst the thickest press of his foes, cried, "Pass first in fight, as thou wert wont to do, and Douglas will follow thee, or die;" and so saying, he rushed forward to the place where it fell, and was there slain.

The chief use of biography consists in the noble models of character in which it abounds. Our great forefathers still live among us in the records of their lives, as well as in the acts they have done, and which live also; still sit by us at table, and hold us by the hand; furnishing examples for our benefit, which we may still study, admire, and imitate. Indeed, whoever has left behind him the record of a noble life, has bequeathed to posterity an enduring source of good, for it lives as a model for others to form themselves by in all time to come; still breathing fresh life into us, helping us to reproduce his life anew, and to illustrate his character in other forms. Hence a book containing the life of a true man is full of precious seed; to use Milton's words, "it is the precious life-blood of a master spirit, embalmed and treasured up on purpose to a life beyond life." Such a book never ceases to exercise an elevating influence, and a power for good. But, above all, there is the very highest Model and Example set before us to shape our lives by in this world—the most suitable for all the necessities of our mind and heart—an example which we can only follow afar off and feel after,

Like plants or vines which never saw the sun,
But dream of him and guess where he may be,
And do their best to climb and get to him.

Again, no young man can rise from the perusal of such lives as those of Buxton and Arnold, without feeling his mind and heart made better, and his best resolves invigorated. Such biographies increase a man's self-reliance

by demonstrating what men can be, and what they can do; fortifying our hopes and elevating our aims in life. Sometimes a young man discovers himself in a biography, as Correggio felt within him the risings of genius on contemplating the works of Michael Angelo: "And I, too, am a painter," he exclaimed. Sir Samuel Romilly, in his autobiography, confessed himself to have been powerfully influenced by the life of the great and noble-minded French Chancellor Daguesseau:—"The works of Thomas," says he, "had fallen into my hands, and I had read with admiration his 'Eloge of Daguesseau;' and the career of honour which he represented that illustrious magistrate to have run, excited to a great degree my ardour and ambition, and opened to my imagination new paths of glory."

Franklin was accustomed to attribute his usefulness and eminence to his having early read Cotton Mather's 'Essays to do Good'—a book which grew out of Mather's own life. And see how good example draws other men after it, and propagates itself through future generations in all lands. For Samuel Drew avers that he framed his own life, and especially his business habits, after the model left on record by Benjamin Franklin. Thus it is impossible to say where a good example may not reach, or where it will end, if indeed it have an end. Hence the advantage, in literature as in life, of keeping the best society, reading the best books, and wisely admiring and imitating the best things we find in them. "In literature," said Lord Dudley, "I am fond of confining myself to the best company, which consists chiefly of my old acquaintance, with whom I am desirous of becoming more intimate; and I suspect that nine times out of ten it is more profitable, if not more agreeable, to read an old book over again, than to read a new one for the first time."

Sometimes a book containing a noble exemplar of life, taken up at random, merely with the object of reading it as a pastime, has been known to call forth energies whose existence had not before been suspected. Alfieri was first

drawn with passion to literature by reading 'Plutarch's Lives.' Loyola, when a soldier serving at the siege of Pampeluna, and laid up by a dangerous wound in his leg, asked for a book to divert his thoughts: the 'Lives of the Saints' was brought to him, and its perusal so inflamed his mind, that he determined thenceforth to devote himself to the founding of a religious order. Luther, in like manner, was inspired to undertake the great labours of his life by a perusal of the 'Life and Writings of John Huss.' Dr. Wolff was stimulated to enter upon his missionary career by reading the 'Life of Francis Xavier;' and the book fired his youthful bosom with a passion the most sincere and ardent to devote himself to the enterprise of his life. William Carey, also, got the first idea of entering upon his sublime labours as a missionary, from a perusal of the Voyages of Captain Cook.

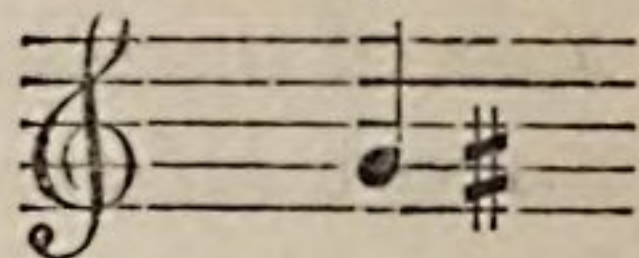
Francis Horner was accustomed to note in his Diary and letters the books by which he was most improved and influenced. Amongst these were Condorcet's 'Eloge of Haller,' Sir Joshua Reynolds' 'Discourses,' the writings of Bacon, and Burnet's account of Sir Matthew Hale. The perusal of the last-mentioned book—the portrait of a prodigy of labour—Horner says, filled him with enthusiasm. Of Condorcet's 'Eloge of Haller,' he said: "I never rise from the account of such men without a sort of thrilling palpitation about me, which I know not whether I should call admiration, ambition, or despair." And, speaking of the 'Discourses' of Sir Joshua Reynolds, he said: "Next to the writings of Bacon, there is no book which has more powerfully impelled me to self-culture. He is one of the first men of genius who has condescended to inform the world of the steps by which greatness is attained; the confidence with which he asserts the omnipotence of human labour, has the effect of familiarising his reader with the idea that genius is an acquisition rather than a gift; whilst with all there is blended so naturally

and eloquently the most elevated and passionate admiration of excellence, that upon the whole there is no book of a more *inflammatory* effect." It is remarkable that Reynolds himself attributed his first passionate impulse towards the study of art, to reading Richardson's account of a great painter; and Haydon was in like manner afterwards inflamed to follow the same pursuit by reading of the career of Reynolds. Thus the brave and aspiring life of one man lights a flame in the minds of others of like faculties and impulse; and where there is equally vigorous effort, like distinction and success will almost surely follow. Thus the chain of example is carried down through time in an endless succession of links,—admiration exciting imitation, and perpetuating the true aristocracy of genius.

One of the most valuable, and one of the most infectious examples which can be set before the young, is that of cheerful working. Cheerfulness gives elasticity to the spirit. Spectres fly before it; difficulties cause no despair, for they are encountered with hope, and the mind acquires that happy disposition to improve opportunities which rarely fails of success. The fervent spirit is always a healthy and happy spirit; working cheerfully itself, and stimulating others to work. It confers a dignity on even the most ordinary occupations. The most effective work, also, is always the full-hearted work—that which passes through the hands or the head of him whose heart is glad. Hume was accustomed to say that he would rather possess a cheerful disposition—inclined always to look at the bright side of things—than with a gloomy mind to be the master of an estate of ten thousand a year. Granville Sharp, amidst his indefatigable labours on behalf of the slave, solaced himself in the evenings by taking part in glees and instrumental concerts at his brother's house, singing, or playing on the flute, the clarionet, or the oboe; and, at the Sunday evening oratorios, when Handel was played, he beat the kettle-drums. He also indulged, though spar-

ingly, in caricature drawing, and would occasionally sign

his own name in musical characters, thus :



Fowell Buxton also was an eminently cheerful man ; taking special pleasure in field sports, in riding about the country with his children, and in mixing in all their domestic amusements.

In another sphere of action, Dr. Arnold was a noble and a cheerful worker, throwing himself into the great business of his life, the training and teaching of young men, with his whole heart and soul. It is stated in his admirable biography, that “ the most remarkable thing in the Laleham circle was the wonderful healthiness of tone which prevailed there. It was a place where a new comer at once felt that a great and earnest work was going forward. Every pupil was made to feel that there was a work for him to do ; that his happiness, as well as his duty, lay in doing that work well. Hence an indescribable zest was communicated to a young man’s feeling about life ; a strange joy came over him on discerning that he had the means of being useful, and thus of being happy ; and a deep respect and ardent attachment sprang up towards him who had taught him thus to value life and his own self, and his work and mission in the world. All this was founded on the breadth and comprehensiveness of Arnold’s character, as well as its striking truth and reality ; on the unfeigned regard he had for work of all kinds, and the sense he had of its value, both for the complex aggregate of society and the growth and protection of the individual. In all this there was no excitement ; no predilection for one class of work above another ; no enthusiasm for any one-sided object : but a humble, profound, and most religious consciousness that work is the appointed calling of man on earth ; the end for which his various faculties were given ; the element in which his nature is ordained to develop itself, and in which his progressive advance to-

wards heaven is to lie." Among the many valuable men trained for public life and usefulness by Arnold, was the gallant Hodson, of Hodson's Horse, who, writing home from India, many years after, thus spoke of his revered master: "The influence he produced has been most lasting and striking in its effects. It is felt even in India; I cannot say more than *that*."

The useful influence which a right-hearted man of energy and industry may exercise amongst his neighbours and dependants, and accomplish for his country, cannot, perhaps, be better illustrated than by the career of Sir John Sinclair; characterized by the Abbé Gregoire as "the most indefatigable man in Europe." He was originally a country laird, born to a considerable estate situate near John o' Groat's House, almost beyond the beat of civilization, in a bare wild country fronting the stormy North Sea. His father dying while he was a youth of sixteen, the management of the family property thus early devolved upon him; and at eighteen he began a course of vigorous improvement in the county of Caithness, which eventually spread all over Scotland. Agriculture then was in a most backward state; the fields were unenclosed, the lands undrained; the small farmers of Caithness were so poor that they could scarcely afford to keep a horse or shelty; the hard work was chiefly done, and the burdens borne, by the women; and if a cottier lost a horse, it was not unusual for him to marry a wife as the cheapest substitute. The country was without roads or bridges; and drovers driving their cattle south had to swim the rivers along with their beasts. The chief track leading into Caithness lay along a high shelf on a mountain side, the road being some hundred feet of clear perpendicular height above the sea which dashed below. Sir John, though a mere youth, determined to make a new road over the hill of Ben Cheilt, the old let-alone proprietors, however, regarding his scheme with incredulity and derision. But he himself laid out the new road, assembled some twelve hundred labourers

early one summer's morning, set them simultaneously to work, watching over their labours, and stimulating them by his presence and example; and before night, what had been a dangerous sheep-track, six miles in length, hardly passable for led horses, was made practicable for wheel-carriages, as if by the powers of magic. It was an admirable example of energy and well-directed labour, which could not fail to have a most salutary influence upon the surrounding population. He then proceeded to make more roads, to erect mills, to build bridges, and to enclose and cultivate his waste lands. He introduced improved methods of culture, and regular rotation of crops; distributing small premiums to encourage industry; and he thus soon quickened the whole frame of society within reach of his influence, and infused an entirely new life into the cultivators of the soil. From being one of the most inaccessible districts of the north—the very *ultima Thule* of civilization—Caithness became a pattern county for its roads, its agriculture, and its fisheries. In Sinclair's youth, the post was carried by a runner only once a-week, and the young baronet then declared that he would never rest till a coach drove daily to Thurso. The people of the neighbourhood could not believe in any such thing, and it became a proverb in the county to say of any utterly impossible scheme, “Ou ay, that will come to pass when Sir John sees the daily mail at Thurso!” But Sir John lived to see his dream realized, and the daily mail established to Thurso.

The circle of his benevolent operations gradually widened. Observing the serious deterioration which had taken place in the quality of British wool,—one of the staple commodities of the country,—he forthwith, though but a private and little-known country gentleman, devoted himself to its improvement. By his personal exertions he established the British Wool Society for the purpose, and himself led the way to practical improvement by importing 800 sheep from all countries, at his own expense. The re-

sult was, the introduction into Scotland of the celebrated Cheviot breed. Sheep farmers scouted the idea of south country flocks being able to thrive in the far north. But Sir John persevered; and in a few years there were not fewer than near 300,000 Cheviots diffused over the four northern counties alone. The value of all grazing land was thus enormously increased; and Scotch estates, which before were comparatively worthless, began to yield large rentals.

Returned by Caithness to Parliament, in which he remained for thirty years, rarely missing a division, his position gave him farther opportunities of usefulness, which he did not neglect to employ. Mr. Pitt, observing his persevering energy in all useful public projects, sent for him to Downing Street, and voluntarily proposed his assistance in any object he might have in view. Another man might have thought of himself and his own promotion; but Sir John characteristically replied, that he desired no favour for himself, but intimated that the reward most gratifying to his feelings would be Mr. Pitt's assistance in the establishment of a National Board of Agriculture. Arthur Young laid a bet with the baronet that his scheme would never be established, adding, "Your Board of Agriculture will be in the moon!" But vigorously setting to work, he roused public attention to the subject, enlisted a majority of Parliament on his side, and eventually established the Board, of which he was appointed President. The result of its action need not be described, but the stimulus which it gave to agriculture and stock-raising was shortly felt throughout the whole United Kingdom, and tens of thousands of acres were redeemed from barrenness by its operation. He was equally indefatigable in encouraging the establishment of fisheries; and the successful founding of these great branches of British industry at Thurso and Wick was mainly due to his exertions. He urged for long years, and at length succeeded in obtaining the enclosure of a harbour for the latter place, which

is perhaps the greatest and most prosperous fishing town in the world.

Sir John threw his personal energy into every work in which he engaged, rousing the inert, stimulating the idle, encouraging the hopeful, and working with all. When a French invasion was threatened, he offered to Mr. Pitt to raise a regiment on his own estate, and he was as good as his word. He went down to the north, and raised a battalion of 600 men, afterwards increased to 1000; and it was admitted to be one of the finest volunteer regiments ever raised, inspired throughout by his own noble and patriotic spirit. While commanding officer of the camp at Aberdeen, he held the offices of a Director of the Bank of Scotland, Chairman of the British Wool Society, Provost of Wick, Director of the British Fishery Society, Commissioner for issuing Exchequer Bills, Member of Parliament for Caithness, and President of the Board of Agriculture. Amidst all this multifarious and self-imposed work, he even found time to write books, enough of themselves to establish a reputation. When Mr. Rush, the American ambassador, arrived in England, he relates that he inquired of Mr. Coke of Holkham, what was the best work on agriculture, and was referred to Sir John Sinclair's; and when he further asked of Mr. Vansittart, Chancellor of the Exchequer, what was the best work on British finance, he was again referred to a work by Sir John Sinclair, his 'History of the Public Revenue.' But the great monument of his indefatigable industry, a work that would have appalled other men, but only served to nerve and rouse his energy, was his 'Statistical Account of Scotland,' in twenty-one volumes, one of the most valuable practical works ever published in any age or country. Amidst a host of other pursuits, it occupied him nearly eight years of hard labour, during which he received, and attended to, upwards of 20,000 letters on the subject. It was a thoroughly patriotic undertaking, from which he derived no personal advantage whatever, beyond the honour of having completed

it. The whole of the profits were assigned by him to the Society for the Sons of the Clergy in Scotland. The publication of the book led to great public improvements; it was followed by the immediate abolition of several oppressive feudal rights, to which it called attention; the salaries of schoolmasters and clergymen in many parishes were increased; and an increased stimulus was given to agriculture throughout Scotland. Sir John then publicly offered to undertake the much greater labour of collecting and publishing a similar Statistical Account of England; but unhappily the then Archbishop of Canterbury refused to sanction it, lest it should interfere with the tithes of the clergy.

A remarkable illustration of his energetic promptitude was the manner in which he once provided, on a great emergency, for the relief of the manufacturing districts. In 1793 the stagnation produced by the war led to an unusual number of bankruptcies, and many of the first houses in Manchester and Glasgow were tottering, not so much from want of property, but because the usual sources of trade and credit were for the time closed up. A period of intense distress amongst the labouring classes seemed imminent, when Sir John urged, in Parliament, that Exchequer notes to the amount of five millions should be issued immediately as a loan to such merchants as could give security. This suggestion was adopted, and his offer to carry out his plan, in conjunction with certain members named by him, was also accepted. The vote was passed late at night, and early next morning Sir John, anticipating the delays of officialism and red tape, proceeded to bankers in the city, and borrowed of them, on his own personal security, the sum of 70,000*l.*, which he despatched the same evening to those merchants who were in the most urgent need of assistance. Pitt, meeting Sir John in the House, expressed his great regret that the pressing wants of Manchester and Glasgow could not be supplied so soon as was desirable, adding, "The money cannot be raised for some days." "It

is already gone! it left London by to-night's mail!" was Sir John's triumphant reply; and in afterwards relating the anecdote he added, with a smile of pleasure, "Pitt was as much startled as if I had stabbed him." To the last this great, good man worked on usefully and cheerfully; setting a great example for his family and for his country. In so laboriously seeking others' good, it might be said that he found his own—not wealth, for his generosity seriously impaired his private fortune, but happiness, and self-satisfaction, and the peace that passes knowledge. A great patriot, with magnificent powers of work, he nobly did his duty to his country; yet he was not neglectful of his own household and home. His sons and daughters grew up to honour and usefulness; and it was one of the proudest things Sir John could say, when verging on his eightieth year, that he had lived to see seven sons grown up, not one of whom had incurred a debt he could not pay, or caused him a sorrow that could have been avoided.

CHAPTER XIII.

CHARACTER—THE TRUE GENTLEMAN.

“For who can always act? but he,
To whom a thousand memories call,
Not being less but more than all
The gentleness he seemed to be,
But seemed the thing he was, and join’d
Each office of the social hour
To noble manners, as the flower
And native growth of noble mind;
And thus he bore without abuse
The grand old name of Gentleman.”—*Tennyson*.

“Everything in Asia—public safety, national honour, personal reputation—rests upon the force of individual character. . . . The officer who forgets that he is a gentleman, does more harm to the moral influence of this country than ten men of blameless life can do good.”—*Lord Stanley to the Students at Addiscombe*.

THE crown and glory of life is character. It is the noblest possession of a man, constituting a rank in itself, and an estate in the general good-will; dignifying every station, and exalting every position in society. It exercises a greater power than wealth, and secures all the honour without the jealousies of fame. It carries with it an influence which always tells; for it is the result of proved honour, rectitude, and consistency—qualities which, perhaps more than any other, command the general confidence and respect of mankind.

Character is human nature in its best form. It is moral order embodied in the individual. Men of character are not only the conscience of society, but in every well-governed State they are its best motive power; for it is moral

qualities in the main which rule the world. Even in war, Napoleon said the moral is to the physical as ten to one. The strength, the industry, and the civilisation of nations—all depend upon individual character; and the very foundations of civil security rest upon it. Laws and institutions are but its outgrowth. In the just balance of nature, individuals, and nations, and races, will obtain just so much as they deserve, and no more. And as effect finds its cause, so surely does quality of character amongst a people produce its befitting results.

Though a man have comparatively little culture, slender abilities, and but small wealth, yet, if his character be of sterling worth, he will always command an influence, whether it be in the workshop, the counting-house, the mart, or the senate. Canning wisely wrote in 1801, "My road must be through Character to power; I will try no other course; and I am sanguine enough to believe that this course, though not perhaps the quickest, is the surest." You may admire men of intellect; but something more is necessary before you will trust them. Hence Lord John Russell once observed, in a sentence full of truth, "It is the nature of party in England to ask the assistance of men of genius, but to follow the guidance of men of character." This was strikingly illustrated in the career of the late Francis Horner—a man of whom Sydney Smith said that the Ten Commandments were stamped upon his countenance. "The valuable and peculiar light," says Lord Cockburn, "in which his history is calculated to inspire every right-minded youth, is this. He died at the age of thirty-eight; possessed of greater public influence than any other private man; and admired, beloved, trusted, and deplored by all, except the heartless or the base. No greater homage was ever paid in Parliament to any deceased member. Now let every young man ask—how was this attained? By rank? He was the son of an Edinburgh merchant. By wealth? Neither he, nor any of his relations, ever had a superfluous sixpence. By

office? He held but one, and only for a few years, of no influence, and with very little pay. By talents? His were not splendid, and he had no genius. Cautious and slow, his only ambition was to be right. By eloquence? He spoke in calm, good taste, without any of the oratory that either terrifies or seduces. By any fascination of manner? His was only correct and agreeable. By what then was it? Merely by sense, industry, good principles, and a good heart—qualities which no well-constituted mind need ever despair of attaining. It was the force of his character that raised him; and this character not impressed upon him by nature, but formed, out of no peculiarly fine elements, by himself. There were many in the House of Commons of far greater ability and eloquence. But no one surpassed him in the combination of an adequate portion of these with moral worth. Horner was born to show what moderate powers, unaided by anything whatever except culture and goodness, may achieve, even when these powers are displayed amidst the competition and jealousy of public life."

Franklin, also, attributed his success as a public man, not to his talents or his powers of speaking—for these were but moderate,—but to his known integrity of character. Hence it was, he says, "that I had so much weight with my fellow citizens. I was but a bad speaker, never eloquent, subject to much hesitation in my choice of words, hardly correct in language, and yet I generally carried my point." Character creates confidence in men in high station as well as in humble life. It was said of the first Emperor Alexander of Russia, that his personal character was equivalent to a constitution. During the wars of the Fronde, Montaigne was the only man amongst the French gentry who kept his castle gates unbarred; and it was said of him, that his personal character was worth more to him than a regiment of horse.

That character is power, is true in a much higher sense than that knowledge is power. Mind without heart, in-

telligence without conduct, cleverness without goodness, are powers in their way, but they may be powers only for mischief. We may be instructed or amused by them; but it is sometimes as difficult to admire them as it would be to admire the dexterity of a pickpocket or the horsemanship of a highwayman.

Truthfulness, integrity, and goodness—qualities that hang not on any man's breath—form the essence of manly character, or, as one of our old writers has it, "that inbred loyalty unto Virtue which can serve her without a livery." He who possesses these qualities, united with strength of purpose, carries with him a power which is irresistible. He is strong to do good, strong to resist evil, and strong to bear up under difficulty and misfortune. When Stephen of Colonna fell into the hands of his base assailants, and they asked him in derision, "Where is now your fortress?" "Here," was his bold reply, placing his hand upon his heart. It is in misfortune that the character of the upright man shines forth with the greatest lustre; and when all else fails, he takes stand upon his integrity and his courage.

The rules of conduct followed by Lord Erskine—a man of sterling independence of principle and scrupulous adherence to truth—are worthy of being engraven on every young man's heart. "It was a first command and counsel of my earliest youth," he said, "always to do what my conscience told me to be a duty, and to leave the consequence to God. I shall carry with me the memory, and I trust the practice, of this parental lesson to the grave. I have hitherto followed it, and I have no reason to complain that my obedience to it has been a temporal sacrifice. I have found it, on the contrary, the road to prosperity and wealth, and I shall point out the same path to my children for their pursuit."

Every man is bound to aim at the possession of a good character, as one of the highest objects of life. The very effort to secure it by worthy means will furnish him with

a motive for exertion ; and his idea of manhood, in proportion as it is elevated, will steady and animate his motive. It is well to have a high standard of life, even though we may not be able altogether to realize it. "The youth," says Mr. Disraeli, "who does not look up will look down ; and the spirit that does not soar is destined perhaps to grovel." George Herbert wisely writes,

"Pitch thy behaviour low, thy projects high,
So shall thou humble and magnanimous be
Sink not in spirit ; who aimeth at the sky
Shoots higher much than he that means a tree."

He who has a high standard of living and thinking will certainly do better than he who has none at all. "Pluck at a gown of gold," says the Scotch proverb, "and you may get a sleeve o't." Whoever tries for the highest results cannot fail to reach a point far in advance of that from which he started ; and though the end accomplished may fall short of that proposed, still, the very effort to rise, of itself cannot fail to prove permanently beneficial.

There are many counterfeits of character, but the genuine article is difficult to be mistaken. Some, knowing its money value, would assume its disguise for the purpose of imposing upon the unwary. Colonel Charteris said to a man distinguished for his honesty, "I would give a thousand pounds for your good name." "Why?" "Because I could make ten thousand by it," was the knave's reply.

Integrity in word and deed is the backbone of character ; and loyal adherence to veracity its most prominent characteristic. One of the finest testimonies to the character of the late Sir Robert Peel was that borne by the Duke of Wellington in the House of Lords, a few days after the great statesman's death. "Your lordships," he said, "must all feel the high and honourable character of the late Sir Robert Peel. I was long connected with him in public life. We were both in the councils of our Sovereign together, and I had long the honour to enjoy his private friendship. In all the course of my acquaintance with

him, I never knew a man in whose truth and justice I had greater confidence, or in whom I saw a more invariable desire to promote the public service. In the whole course of my communication with him, I never knew an instance in which he did not show the strongest attachment to truth; and I never saw in the whole course of my life the smallest reason for suspecting that he stated anything which he did not firmly believe to be the fact." And this high-minded truthfulness of the statesman was no doubt the secret of no small part of his influence and power.

There is a truthfulness in action as well as in words, which is essential to uprightness of character. A man must really be what he seems or purposes to be. When an American gentleman wrote to Granville Sharp, that from respect for his great virtues he had named one of his sons after him, Sharp replied: "I must request you to teach him a favourite maxim of the family whose name you have given him—*Always endeavour to be really what you would wish to appear.* This maxim, as my father informed me, was carefully and humbly practised by *his* father, whose sincerity, as a plain and honest man, thereby became the principal feature of his character, both in public and private life." Every man who respects himself, and values the respect of others, will carry out the maxim in act—doing honestly what he proposes to do—putting the highest character into his work, scamping nothing, but priding himself upon his integrity and conscientiousness. Once Cromwell said to Bernard,—a clever but somewhat unscrupulous lawyer, "I understand that you have lately been vastly wary in your conduct; do not be too confident of this; subtlety may deceive you, integrity never will." Men whose acts are at direct variance with their words, command no respect, and what they say has but little weight; even truths, when uttered by them, seem to come blasted from their lips.

The true character acts rightly, whether in secret or in the sight of men. That boy was well trained who, when

asked why he did not pocket some pears, for nobody was there to see, replied, "Yes, there was: I was there to see myself; and I don't intend ever to see myself do a dishonest thing." This is a simple but not inappropriate illustration of principle, or conscience, dominating in the character, and exercising a noble protectorate over it; not merely a passive influence, but an active power regulating the life. Such a principle goes on moulding the character hourly and daily, growing with a force that operates every moment. Without this dominating influence, character has no protection, but is constantly liable to fall away before temptation; and every such temptation succumbed to, every act of meanness or dishonesty, however slight, causes self-degradation. It matters not whether the act be successful or not, discovered or concealed; the man is no longer the same, but another person; and he is pursued by a secret uneasiness, by self-reproach, or the workings of what we call conscience, which is the inevitable doom of the guilty.

And here it may be observed how greatly the character may be strengthened and supported by the cultivation of good habits. Man, it has been said, is a bundle of habits: and habit is second nature. Metastasio entertained so strong an opinion as to the power of repetition in act and thought, that he said, "All is habit in mankind, even virtue itself." Butler, in his 'Analogy,' impresses the importance of careful self-discipline, and firm resistance to temptation, as tending to make virtue habitual, so that at length it may become more easy to be good than to give way to sin. "As habits belonging to the body," he says, "are produced by external acts, so habits of the mind are produced by the execution of inward practical purposes, *i. e.*, carrying them into act, or acting upon them—the principles of obedience, veracity, justice, and charity." And again, Lord Brougham says, when enforcing the immense importance of training and example in youth, "I trust everything under God to habit, on which, in all ages, the

lawgiver, as well as the schoolmaster, has mainly placed his reliance; habit, which makes everything easy, and casts the difficulties upon the deviation from a wonted course." Thus, make sobriety a habit, and intemperance will be hateful; make prudence a habit, and reckless prodigality will become revolting to every principle of conduct which regulates the life of the individual. Hence the necessity for the greatest care and watchfulness against the inroad of any evil habit; for the character is always weakest at that point at which it has once given way; and it is long before a principle restored can become so firm as one that has never been moved. It is a fine remark of a Russian writer, that "Habits are a necklace of pearls: untie the knot, and the whole unthreads."

Wherever formed, habit acts involuntarily, and without effort; and, it is only when you oppose it, that you find how powerful it has become. What is done once and again, soon gives facility and proneness. The habit at first may seem to have no more strength than a spider's web; but once formed, it binds as with a chain of iron. The small events of life, taken singly, may seem exceedingly unimportant, like snow that falls silently, flake by flake; yet accumulated, these snow-flakes form the avalanche.

Self-respect, self-help, application, industry, integrity—all are of the nature of habits, not beliefs. Principles, in fact, are but the names which we assign to habits; for the principles are words, but the habits are the things themselves: benefactors or tyrants, according as they are good or evil. It thus happens that as we grow older, a portion of our free activity and individuality becomes suspended in habit; our actions become of the nature of fate; and we are bound by the chains which we have woven around ourselves.

It is indeed scarcely possible to over-estimate the importance of training the young to virtuous habits. In them they are the easiest formed, and when formed they last for life; like letters cut on the bark of a tree, they grow and

widen with age. "Train up a child in the way he should go, and when he is old he will not depart from it." The beginning holds within it the end; the first start on the road of life determines the direction and the destination of the journey; *ce n'est que le premier pas qui coute* "Remember," said Lord Collingwood to a young man whom he loved, "before you are five-and-twenty you must establish a character that will serve you all your life." As habit strengthens with age, and character becomes formed, any turning into a new path becomes more and more difficult. Hence, it is often harder to unlearn than to learn; and for this reason the Grecian flute-player was justified who charged double fees to those pupils who had been taught by an inferior master. To uproot an old habit is sometimes a more painful thing, and vastly more difficult, than to wrench out a tooth. Try and reform a habitually indolent, or improvident, or drunken person, and in a large majority of cases you will fail. For the habit in each case has wound itself in and through the life until it has become an integral part of it, and cannot be uprooted. Hence, as Mr. Lynch observes, "the wisest habit of all is the habit of care in the formation of good habits."

Even happiness itself may become habitual. There is a habit of looking at the bright side of things, and also of looking at the dark side. Dr. Johnson has said that the habit of looking at the best side of a thing is worth more to a man than a thousand pounds a year. And we possess the power, to a great extent, of so exercising the will as to direct the thoughts upon objects calculated to yield happiness and improvement rather than their opposites. In this way the habit of happy thought may be made to spring up like any other habit. And to bring up men or women with a genial nature of this sort, a good temper, and a happy frame of mind, is perhaps of even more importance, in many cases, than to perfect them in much knowledge and many accomplishments.

As daylight can be seen through very small holes, so

little things will illustrate a person's character. Indeed character consists in little acts, well and honourably performed; daily life being the quarry from which we build it up, and rough-hew the habits which form it. One of the most marked tests of character, is the manner in which we conduct ourselves towards others. A graceful behaviour towards superiors, inferiors, and equals, is a constant source of pleasure. It pleases others because it indicates respect for their personality; but it gives tenfold more pleasure to ourselves. Every man may to a large extent be a self-educator in good behaviour, as in everything else; he can be civil and kind, if he will, though he have not a penny in his purse. Gentleness in society is like the silent influence of light, which gives colour to all nature; it is far more powerful than loudness or force, and far more fruitful. It pushes its way quietly and persistently, like the tiniest daffodil in spring, which raises the clod and thrusts it aside by the simple persistency of growing.

Morals and manners, which give colour to life, are of greater importance than laws, which are but one of their manifestations. The law touches us here and there, but manners are about us everywhere, pervading society like the air we breathe. Good manners, as we call them, are neither more nor less than good behaviour; consisting of courtesy and kindness; for benevolence is the preponderating element in all kinds of mutually beneficial and pleasant intercourse amongst human beings. "Civility," said Lady Montague, "costs nothing and buys everything." The cheapest of all things is kindness, its exercise requiring the least possible trouble and self sacrifice. "Win hearts," said Burleigh to Queen Elizabeth, "and you have all men's hearts and purses." If we would only let nature act kindly, free from affectation and artifice, the results on social good humour and happiness would be incalculable. Those little courtesies which form the small change of life, may separately appear of little intrinsic value, but they acquire their importance from repetition

and accumulation. They are like the spare minutes, or the groat a day, which proverbially produce such momentous results in the course of a twelvemonth, or in a lifetime.

Manners are the ornament of action ; and there is a way of speaking a kind word, or of doing a kind thing, which greatly enhances their value. What seems to be done with a grudge, or as an act of condescension, is scarcely accepted as a favour. Yet there are men who pride themselves upon their gruffness ; and though they may possess virtue and capacity, their manner is often found to render them almost insupportable. It is difficult to like a man who, though he may not pull your nose, habitually wounds your self-respect, and takes a pride in saying disagreeable things to you. There are others who are dreadfully condescending, and cannot avoid seizing upon every small opportunity of making their greatness felt. When Abernethy was canvassing for the office of surgeon to St. Bartholomew Hospital, he called upon such a person—a rich grocer, one of the governors. The great man behind the counter seeing the great surgeon enter, immediately assumed the grand air towards the supposed suppliant for his vote. “I presume, Sir, you want my vote and interest at this momentous epoch of your life.” Abernethy, who hated humbugs, and felt nettled at the tone, replied : “No, I don’t : I want a pennyworth of figs ; come, look sharp and wrap them up ; I want to be off !”

The cultivation of manner—though in excess it is foppish and foolish—is highly necessary in a person who has occasion to negotiate with others in matters of business. Affability and good breeding may even be regarded as essential to the success of a man in any eminent station and enlarged sphere of life ; for the want of it has not unfrequently been found in a great measure to neutralise the results of much industry, integrity, and honesty of character. There are, no doubt, a few strong tolerant minds which can bear with defects and angularities of manner, and look only to the more genuine qualities ; but the world

at large is not so forbearant, and cannot help forming its judgments and likings mainly according to outward conduct.

Another mode of displaying true politeness is, consideration for the opinions of others. It has been said of dogmatism, that it is only puppyism come to its full growth; and certainly the worst form this quality can assume, is that of opinionativeness and arrogance. Let men agree to differ, and, when they do differ, bear and forbear. Principles and opinions may be maintained with perfect suavity, without coming to blows or uttering hard words, and there are circumstances in which words are blows, and inflict wounds far less easy to heal. As bearing upon this point, we quote an instructive little parable spoken some time since by an itinerant preacher of the Evangelical Alliance on the borders of Wales:—"As I was going to the hills," he said, "early one misty morning, I saw something moving on a mountain side, so strange-looking that I took it for a monster. When I came nearer to it, I found it was a man. When I came up to him, I found he was my brother."

The inbred politeness which springs from right-heartedness and kindly feelings, is of no exclusive rank or station. The mechanic who works at the bench may possess it, as well as the clergyman or the peer. It is by no means a necessary condition of labour, that it should in any respect be either rough or coarse. The politeness and refinement which distinguish all classes of the people in many continental countries amply prove that those qualities might become ours too—as doubtless they will become with increased culture and more general social intercourse—without sacrificing any of our more genuine qualities as men. From the highest to the lowest, the richest to the poorest, to no rank or condition in life has nature denied her highest boon—the great heart. There never yet existed a gentleman but was lord of a great heart. And this may exhibit itself under the hodden grey of the peasant as well as under the laced coat of the

noble. Robert Burns was once taken to task by a young Edinburgh blood, with whom he was walking, for recognising an honest farmer in the open street. "Why, you fantastic gomeral," exclaimed Burns, "it was not the great coat, the scone bonnet, and the saunders-boot hose that I spoke to, but *the man* that was in them; and the man, sir, for true worth, would weigh down you and me, and ten more such, any day." There may be a homeliness in externals, which may seem vulgar to those who cannot discern the heart beneath; but, to the right-minded, character will always have its clear insignia.

William and Charles Grant were the sons of a farmer in Inverness-shire, whom a sudden flood stripped of everything, even to the very soil which he tilled. The farmer and his sons, with the world before them where to choose, made their way southward in search of employment until they arrived in the neighbourhood of Bury in Lancashire. From the crown of the hill near Walmesley they surveyed the wide extent of country which lay before them, the river Irwell making its circuitous course through the valley. They were utter strangers in the neighbourhood, and knew not which way to turn. To decide their course they put up a stick, and agreed to pursue the direction in which it fell. Thus their decision was made, and they journeyed on accordingly until they reached the village of Ramsbotham, not far distant. They found employment in a print-work, in which William served his apprenticeship; and they commended themselves to their employers by their diligence, sobriety, and strict integrity. They plodded on, rising from one station to another, until at length the two sons themselves became employers, and after many long years of industry, enterprise, and benevolence, they became rich, honoured, and respected by all who knew them. Their cotton-mills and print-works gave employment to a large population. Their well-directed diligence made the valley teem with activity, joy, health, and opulence. Out of their abundant wealth they gave

liberally to all worthy objects, erecting churches, founding schools, and in all ways promoting the well-being of the class of working-men from which they had sprung. They afterwards erected, on the top of the hill above Walmesley, a lofty tower in commemoration of the early event in their history which had determined the place of their settlement. The brothers Grant became widely celebrated for their benevolence and their various goodness, and it is said that Mr. Dickens had them in his mind's eye when delineating the character of the brothers Cheeryble. One amongst many anecdotes of a similar kind may be cited to show that the character was by no means exaggerated. A Manchester warehouseman published an exceedingly scurrilous pamphlet against the firm of Grant Brothers, holding up the elder partner to ridicule as "Billy Button." William was informed by some one of the nature of the pamphlet, and his observation was that the man would live to repent of it. "Oh!" said the libeller, when informed of the remark, "he thinks that some time or other I shall be in his debt; but I will take good care of that." It happens, however, that men in business do not always foresee who shall be their creditor, and it so turned out that the Grants' libeller became a bankrupt, and could not complete his certificate and begin business again without obtaining their signature. It seemed to him a hopeless case to call upon that firm for any favour, but the pressing claims of his family forced him to make the application. He appeared before the man whom he had ridiculed as "Billy Button" accordingly. He told his tale and produced his certificate. "You wrote a pamphlet against us once?" said Mr. Grant. The suppliant expected to see his document thrown into the fire; instead of which Grant signed the name of the firm, and thus completed the necessary certificate. "We make it a rule," said he, handing it back, "never to refuse signing the certificate of an honest tradesman, and we have never heard that you were anything else." The tears started into the man's eyes. "Ah,"

continued Mr. Grant, "you see my saying was true, that you would live to repent writing that pamphlet. I did not mean it as a threat—I only meant that some day you would know us better, and repent having tried to injure us." "I do, I do, indeed, repent it." "Well, well, you know us now. But how do you get on—what are you going to do?" The poor man stated that he had friends who would assist him when his certificate was obtained. "But how are you off in the mean time?" The answer was, that, having given up every farthing to his creditors, he had been compelled to stint his family in even the common necessities of life, that he might be enabled to pay for his certificate. "My good fellow, this will never do; your wife and family must not suffer in this way; be kind enough to take this ten-pound note to your wife from me: there, there, now—don't cry, it will be all well with you yet; keep up your spirits, set to work like a man, and you will raise your head among the best of us yet." The overpowered man endeavoured with choking utterance to express his gratitude, but in vain; and putting his hand to his face, he went out of the room sobbing like a child.

The True Gentleman is one whose nature has been fashioned after the highest models. It is a grand old name, that of Gentleman, and has been recognised as a rank and power in all stages of society. "The Gentleman is always the Gentleman," said the old French general to his regiment of Scottish gentry at Rousillon, "and invariably proves himself such in need and in danger." To possess this character is a dignity of itself, commanding the instinctive homage of every generous mind, and those who will not bow to titular rank, will yet do homage to the Gentleman. His qualities depend not upon fashion or manners, but upon moral worth—not on personal possessions, but on personal qualities. The Psalmist briefly describes him as one "that walketh uprightly, and worketh righteousness, and speaketh the truth in his heart."

The Gentleman is eminently distinguished for his self-respect. He values his character,—not so much of it only as can be seen of others, but as he sees it himself; having regard for the approval of his inward monitor. And, as he respects himself, so, by the same law, does he respect others. Humanity is sacred in his eyes: and thence proceed politeness and forbearance, kindness and charity. It is related of Lord Edward Fitzgerald that, while travelling in Canada, in company with the Indians, he was shocked by the sight of a poor squaw trudging along laden with her husband's trappings, while the chief himself walked on unencumbered. Lord Edward at once relieved the squaw of her pack by placing it upon his own shoulders. Here was a beautiful instance of what the French call *politesse de cœur*—the genuine politeness of the heart.

The true gentleman has a keen sense of honour,—scrupulously avoiding mean actions. His standard of probity in word and action is high. He does not shuffle nor prevaricate, dodge nor skulk; but is honest, upright, and straightforward. His law is rectitude—action in right lines. When he says *yes*, it is a law: and he dares to say the valiant *no* at the fitting season. The gentleman will not be bribed; only the low-minded and unprincipled will sell themselves to those who are interested in buying them. When the upright Jonas Hanway officiated as commissioner in the victualling department, he declined to receive a present of any kind from a contractor: refusing thus to be biassed in the performance of his public duty. A noble trait of the same kind is to be noted in the life of the Duke of Wellington. Shortly after the battle of Assaye, one morning the prime minister of the Court of Hyderabad waited upon him for the purpose of privately ascertaining what territory and what advantages had been reserved for his master in the treaty of peace between the Mahratta princes and the Nizam. To obtain this information the minister offered the general a very large sum—considerably

above 100,000*l.* Looking at him quietly for a few seconds, Sir Arthur said, "It appears, then, that you are capable of keeping a secret?" "Yes, certainly," replied the minister. "*Then so am I,*" said the English general, smiling, and bowed the minister out. It was to Wellington's great honour, that though uniformly successful in India, and with the power of earning in such modes as this enormous wealth, he did not add a farthing to his fortune, and returned to England a comparatively poor man. A similar sensitiveness and high-mindedness characterised his noble relative, the Marquis of Wellesley, who, on one occasion, positively refused a present of 100,000*l.* proposed to be given him by the Directors of the East India Company on the conquest of Mysore. "It is not necessary," said he, "for me to allude to the independence of my character, and the proper dignity attaching to my office; other reasons besides these important considerations lead me to decline this testimony, which is not suitable to me. *I think of nothing but our army.* I should be much distressed to curtail the share of those brave soldiers." And the Marquis's resolution to refuse the present remained unalterable.

Riches and rank have no necessary connexion with genuine gentlemanly qualities. The poor man may be a true gentleman,—in spirit and in daily life. He may be honest, truthful, upright, polite, temperate, courageous, self-respecting, and self-helping,—that is, be a true gentleman. The poor man with a rich spirit is in all ways superior to the rich man with a poor spirit. To borrow St. Paul's words, the former is as "having nothing, yet possessing all things," while the other, though possessing all things, has nothing. The first hopes everything, and fears nothing; the last hopes nothing, and fears everything. Only the poor in spirit are really poor. He who has lost all, but retains his courage, cheerfulness, hope, virtue, and self-respect, is still rich. For such a man, the world is, as it were, held in trust; his spirit domi-

nating over its grosser cares, he can still walk erect, a true gentleman.

Occasionally, the brave and gentle character may be found under the humblest garb. Here is an old illustration, but a fine one. Once on a time, when the Adige suddenly overflowed its banks, the bridge of Verona was carried away, with the exception of the centre arch, on which stood a house, whose inhabitants supplicated help from the windows, while the foundations were visibly giving way. "I will give a hundred French louis," said the Count Spolverini, who stood by "to any person who will venture to deliver these unfortunate people." A young peasant came forth from the crowd, seized a boat, and pushed into the stream. He gained the pier, received the whole family into the boat, and made for the shore, where he landed them in safety. "Here is your money, my brave young fellow," said the count. "No," was the answer of the young man, "I do not sell my life; give the money to this poor family, who have need of it." Here spoke the true spirit of the Gentleman, though he was but in the garb of a peasant!

Mr. Turnbull, in his excellent work on 'Austria,' relates an anecdote of the late Emperor Francis, in illustration of the manner in which the Government of that country has been indebted, for its hold upon the people, to the personal qualities of its princes. "At the time when the cholera was raging at Vienna, the emperor, with an aide-de-camp, was strolling about in the streets of the city and suburbs, when a corpse was dragged past on a litter unaccompanied by a single mourner. The unusual circumstance attracted his attention, and he learnt, on inquiry, that the deceased was a poor person who had died of cholera, and that the relatives had not ventured on what was then considered the very dangerous office of attending the body to the grave. 'Then,' said Francis, 'we will supply their place, for none of my poor people should go to the grave without that last mark of respect;' and he followed the body to the

distant place of interment, and bare-headed, stood to see every rite and observance respectfully performed."

Fine though this illustration may be of the qualities of the gentleman, we can match it by another equally good, of two English navvies in Paris, as related in a morning paper only a few months ago. "One day a hearse was observed ascending the steep Rue de Clichy on its way to Montmartre, bearing a coffin of poplar wood with its cold corpse. Not a soul followed—not even the living dog of the dead man, if he had one. The day was rainy and dismal; passers by lifted the hat as is usual when a funeral passes, and that was all. At length it passed two English navvies, who found themselves in Paris on their way from Spain. A right feeling spoke from beneath their serge jackets. 'Poor wretch!' said the one to the other, 'no one follows him; let us two follow!' And the two took off their hats, and walked bare-headed after the corpse of a stranger to the cemetery of Montmartre."

Above all, the Gentleman is truthful. He feels that truth is the "summit of being," and the soul of rectitude in human affairs. Lord Chesterfield, with all his French leanings, when he came to define a gentleman, declared that Truth made his success; and nothing that he ever said commanded the more hearty suffrage of his nation. The Duke of Wellington, who had an inflexible horror of falsehood, writing to Kellerman, when that general was opposed to him in the Peninsula, told him that, if there was one thing on which an English officer prided himself more than another, excepting his courage, it was his truthfulness. "When English officers," said he, "have given their parole of honour not to escape, be sure they will not break it. Believe me—trust to their word; the word of an English officer is a surer guarantee than the vigilance of sentinels."

True courage and gentleness go hand in hand. The brave man is generous and forbearant, never unforgiving and cruel. It was finely said of Sir John Franklin by his friend Parry, that "he was a man who never turned his

back upon a danger, yet of that tenderness that he would not brush away a musquito." A fine trait of character—truly gentle, and worthy of the spirit of Bayard—was displayed by a French officer in the cavalry combat of El Bodon in Spain. He had raised his sword to strike Sir Felton Harvey, but perceiving his antagonist had only one arm, he instantly stopped, brought down his sword before Sir Felton in the usual salute, and rode past.

Notwithstanding the wail which we occasionally hear for the chivalry that is gone, our own age has witnessed deeds of bravery and gentleness—of heroic self-denial and manly tenderness—which are unsurpassed in history. The events of the last few years have shown that our countrymen are as yet an undegenerate race. On the bleak plateau of Sebastopol, in the dripping perilous trenches of that twelvemonths' leaguer, men of all classes proved themselves worthy of the noble inheritance of character which their forefathers have bequeathed to them. But it was in the hour of the greatest trial in India that the qualities of our countrymen shone forth the brightest. The march of Neill on Cawnpore, of Havelock on Lucknow—officers and men alike urged on by the hope of rescuing the women and the children—are events which the whole history of chivalry cannot equal. Outram's conduct to Havelock, in resigning to him, though his inferior officer, the honour of leading the attack on Lucknow, was a trait worthy of Sydney, and alone justifies the title which had been awarded to him of "the Bayard of India." The death of Henry Lawrence—that brave and gentle spirit—his last words before dying, "Let there be no fuss about me; let me be buried *with the men*,"—the anxious solicitude of Sir Colin Campbell to rescue the beleaguered of Lucknow, and to conduct his long train of women and children by night from thence to Cawnpore, which he reached amidst the all but overpowering assault of the enemy,—the care with which he led them across the perilous bridge, never ceasing his charge over them until he had seen the precious

convoy safe on the road to Allahabad, and then burst upon the Gwalior contingent like a thunderclap;—such things make us feel proud of our countrymen, and inspire the conviction that the best and purest glow of chivalry is not dead, but vigorously lives among us yet.

Even the common soldiers proved themselves gentlemen under their trials. At Agra, where so many poor fellows had been scorched and wounded in their encounter with the enemy, they were brought into the fort, and tenderly nursed by the ladies; and the rough, gallant fellows proved gentle as any children. During the weeks that the ladies watched over their charge, never a word was said by any soldier that could shock the ear of the gentlest. And when all was over—when the mortally-wounded had died, and the sick and maimed who survived were able to demonstrate their gratitude—they invited their nurses and the chief people of Agra to an entertainment in the beautiful gardens of the Taj, where, amidst flowers and music, the rough veterans, all scarred and mutilated as they were, stood up to thank their gentle countrywomen who had clothed and fed them, and ministered to their wants during their time of sore distress. In the hospitals at Scutari, too, many wounded and sick blessed the kind English ladies who nursed them; and nothing can be finer than the thought of the poor sufferers, unable to rest through pain, blessing the shadow of Florence Nightingale as it fell upon their pillow in the night watches.

The wreck of the *Birkenhead* off the coast of Africa on the 27th of February, 1852, affords another memorable illustration of the chivalrous spirit of common men acting in this nineteenth century, of which any age might be proud. The vessel was steaming along the African coast with 472 men and 166 women and children on board. The men belonged to several regiments then serving at the Cape, and consisted principally of recruits, who had been only a short time in the service. At two o'clock in the morning, while all were asleep below, the ship struck with violence

upon a hidden rock which penetrated her bottom; and it was at once felt that she must go down. The roll of the drums called the soldiers to arms on the upper deck, and the men mustered as if on parade. The word was passed to *save the women and children*; and the helpless creatures were brought from below, mostly undressed, and handed silently into the boats. When they had all left the ship's side, the commander of the vessel thoughtlessly called out, "All those that can swim, jump overboard and make for the boats." But Captain Wright, of the 91st Highlanders, said, "No! if you do that, *the boats with the women must be swamped*;" and the brave men stood motionless. There was no boat remaining, and no hope of safety; but not a heart quailed; no one flinched from his duty in that trying moment. "There was not a murmur nor a cry amongst them," said Captain Wright, a survivor, "until the vessel made her final plunge." Down went the ship, and down went the heroic band, firing a *feu de joie* as they sank beneath the waves. Glory and honour to the gentle and the brave! The examples of such men never die, but, like their memories, are immortal.

There are many tests by which a gentleman may be known; but there is one that never fails—How does he *exercise power* over those subordinate to him? How does he conduct himself towards women and children? How does the officer treat his men, the employer his servants, the master his pupils, and man in every station those who are weaker than himself? The discretion, forbearance, and kindness, with which power in such cases is used, may indeed be regarded as the crucial test of gentlemanly character. He who bullies those who are not in a position to resist, may be a snob, but cannot be a gentleman. He who tyrannizes over the weak and helpless, may be a coward, but no true man. The tyrant, it has been said, is himself but a slave turned inside out. Strength, and the consciousness of strength, in a right hearted man, imparts a nobleness to

his character; but he will be most careful how he uses it; for

“It is excellent
To have a giant’s strength; but it is tyrannous
To use it like a giant.”

Gentleness is indeed the best test of gentlemanliness. A consideration for the feelings of others, for his inferiors and dependants as well as his equals, and respect for their self-respect, will pervade the true gentleman’s whole conduct. He will rather himself suffer a small injury, than by an uncharitable construction of another’s behaviour, incur the risk of committing a great wrong. He will be forbearant of the weaknesses, the failings, and the errors, of those whose advantages in life have not been equal to his own. He will be merciful even to his beast. He will not boast of his wealth, or his strength, or his gifts. He will not confer favours with a patronizing air. Sir Walter Scott once said of Lord Lothian, “He is a man from whom one may receive a favour, and that’s saying a great deal in these days.” Lord Chatham has said that the gentleman is characterised by his preference of others to himself in the little daily occurrences of life. In illustration of this ruling spirit of considerateness in a noble character, we may cite the anecdote of the gallant Sir Ralph Abercromby, of whom it is related, that when mortally wounded in the battle of Aboukir, he was carried in a litter on board the ‘Foudroyant;’ and, to ease his pain, a soldier’s blanket was placed under his head, from which he experienced considerable relief. He asked what it was. “It’s only a soldier’s blanket,” was the reply. “*Whose* blanket is it?” said he, half lifting himself up. “Only one of the men’s.” “I wish to know the name of the man whose blanket this is.” “It is Duncan Roy’s, of the 42nd, Sir Ralph.” “Then see that Duncan Roy gets his blanket this very night.” * Even to ease his dying agony, the general would not

* Brown’s ‘*Horæ Subcivæ*.’

deprive the private soldier of his blanket for one night. The incident is as good in its way as that of the dying Sydney handing his cup of water to the private soldier on the field of Zutphen.

The quaint old Fuller sums up in a few words the character of the true gentleman and man of action in describing that of the great admiral, Sir Francis Drake: "Chaste in his life, just in his dealings, true of his word; merciful to those that were under him, and hating nothing so much as idlenesse; in matters especially of moment, he was never wont to rely on other men's care, how trusty or skilful soever they might seem to be, but always contemning danger, and refusing no toyl; he was wont himself to be one (whoever was a second) at every turn, where courage, skill, or industry, was to be employed."

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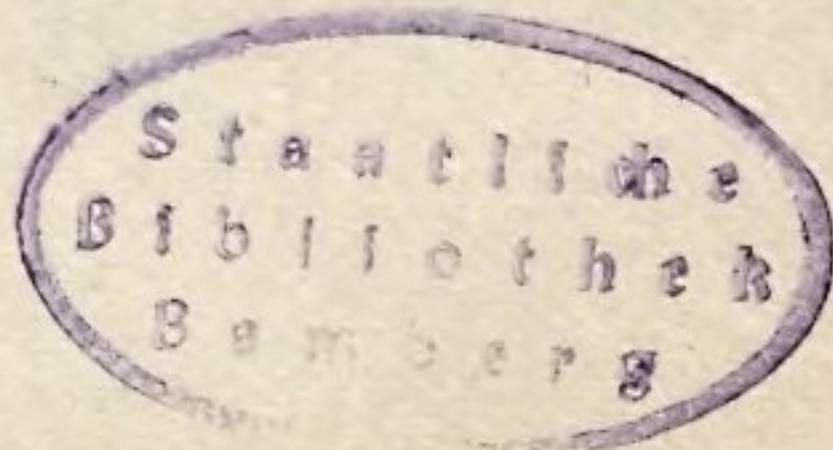
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INDUSTRIAL BIOGRAPHY: IRON WORKERS AND TOOL MAKERS.

By SAMUEL SMILES,

AUTHOR OF 'LIVES OF BRITISH ENGINEERS,' ETC.

OPINIONS OF THE PRESS.

'Mr. Smiles has hit upon a rich vein of ore, and works it with great success. He has the art of biography, which is by no means so easy of attainment as, judging from the number of persons who attempt this species of composition, one would imagine it to be. Memoirs are countless, but the number of biographies that can be accepted as successful works of art are very few indeed. Mr. Smiles is not only a skilful workman, but he has chosen a new field of work. Hitherto the great biographies have been written of soldiers and sailors, statesmen, poets, artists, and philosophers. It would seem as if these only were the great men of the world, as if these only were the benefactors of mankind, whose deeds are worthy of memory. The suspicion has arisen that, after all, there may be other heroes than those of the pen, the sceptre, and the sword. There are, indeed, men in various walks of life whose footsteps are worthy of being traced; but surely, considering what England is, and to what we owe most of our material greatness, the lives of our engineers are peculiarly worthy of being written. "The true Epic of our time," says Mr. Carlyle, "is not Arms and the man, but Tools and the man—an infinitely wider kind of Epic." Our machinery has been the making of us; our ironworks have, in spite of the progress of other nations, still kept the balance in our hands. Smith-work in all its branches of engine-making, machine-making, tool-making, cutlery, iron ship-building, and iron-working generally, is our chief glory. England is the mistress of manufactures and the queen of the world, because it is the land of Smith; and Mr. Smiles's biographies are a history of the great family of Smith. . . . Many of the facts which he places before us are wholly new, and are derived from the most likely sources. Thus, Maudslay's partner, Mr. Joshua Field, and his pupil, Mr. Nasmyth, supplied the materials for his biography. Mr. John Penn supplied the chief material for the memoir of Clement. And so of the other memoirs; though they necessarily go over much well-trodden ground, they contain also much original information, expressed with great clearness, and with a practised skill which renders the reader secure of entertainment in every page.'—*Times*.

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"Labourers that have no land
To live on but hire [their] hands,"

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'Mr. Smiles is the prose Homer of the iron age, and his heroes are the renowned inventors, railway-makers, engineers, shipbuilders, and artificers in brass, iron, and steel, those mighty men of valour who have subjugated the material forces of nature, and have placed, within the last hundred years, more power into the hands of men than ever they had before. This field of biography was almost unknown before Mr. Smiles began to labour in it a few years ago; and few, we daresay, had any idea that it was so rich till the *Lives of the Engineers* appeared. That work immediately became popular, and showed that the author had hit upon a new vein in the literary mine, which it was at once seen would be eminently productive. In the hands of Mr. Smiles the engineers received ample justice, and now he has taken upon himself the task of doing the same for some of the prominent iron-workers and tool-makers, and it is almost needless to say that he has succeeded admirably. Mr. Smiles's biographies are models of neatness, conciseness, and simplicity. He has the happy art of not saying too much, and of always saying that which is really interesting, which so few biographers possess; and we do not know of any one, since Carlyle gave up writing his short biographical essays, who is so successful in placing a real living personage before his readers as our author. He has a clear steady eye for the great distinguishing features of his engineers and inventors, and a firm hand in reproducing these. All that is trivial, inconsequential, and merely accidental about their lives is quietly set aside, or placed far in the background, while the men and their works are brought prominently before us. This is the true method of writing biography, for it is after the same fashion that Time uses the lives of the greatest men. Mr. Smiles's memoirs of Bramah, Henry Maudslay, Joseph Clement, Fox of Derby, Murray of Leeds, the Whitworths of Manchester, James Nasmyth, and William Fairbairn will be found as entertaining reading as his *Lives of the Engineers*. We have no doubt that the present work will rival in popularity the previous books by the same eminent author.'—*Glasgow Daily News*.

'Mr. Smiles offers in this volume a popular and valuable continuation of the series of industrial biographies which has attracted so much attention under the title of *Lives of the Engineers*. The design of that work was a happy thought in this practical age, and its success has demonstrated the eminent ability with which the design was executed. The present volume rescues from fast-coming oblivion the names of many to whom the industry of our country is indebted for the methods and appliances which have given it a decided pre-eminence over that of other countries. The volume is a prose epic upon Mr. Carlyle's suggestion, "Tools and the Man," or rather the men he commemorates, whose magic labours gave to the feeble arm of man a force immeasurably greater than any with which Arabian fable ever endowed the genii of the lamp or the ring. The history of the invention of some of these tools and implements is of deep interest, and illustrates in a surprising manner the mastery of mind over matter. It is indeed "a fairy tale of science." And although it tells the mournful story of Henry Cort, it tells us also of many whose efforts were crowned with distinguished success. It is impossible, for example, to read the story of Joseph Clement, the slater's boy, before whom all material difficulties seemed to vanish as by enchantment, without feeling whatever there is of enterprise or self-reliance in one stirred up; or to follow the career of James Nasmyth, who seemed equally at home in investigating the course of the stars, in the use of his mighty steam-hammer, and in his knowledge of antiquity, without glorying in the power of intellect. It is hardly necessary to say that Mr. Smiles's new work breathes the same manly self-reliant spirit that characterises all his previous publications. He obtrudes no advice upon his readers, but if they are capable of any noble aspirations, or any feeling of self-respect, he here sets before them examples that will assuredly enkindle and sustain these emotions.'—*Daily News*.

'Mr. Smiles has become the biographer of our profession. Only the other day the world knew little or nothing of the *Lives of the Engineers*, whether of this century or the last. There were none who, as authors, attempted to blend with general biographical portraiture that popular reference to constructive and mechanical details, without which the life of an engineer or an inventor would be either a chapter of naked facts or of indiscriminate eulogy. In his *Life of George Stephenson*, Mr. Smiles showed that practical appreciation of the strong points of engineering life which, with his skill and industry as a biographer, has

given us a new department of literature. The great success of that book proved that there were many thousands who were not only willing but desirous to know something of our railway makers and mechanics. Mr. Smiles has since done much in this branch of biography, and in his present book he has grouped together the leading incidents of the professional lives of Dud Dudley, Andrew Yarranton, Abraham Darby, Richard Reynolds, Benjamin Huntsman, Henry Cort, Dr. Roebuck, David Mushet, J. B. Neilson, Joseph Bramah, Henry Maudslay, Joseph Clement, Fox of Derby, Matthew Murray, Richard Roberts, Joseph Whitworth, James Nasmyth, and William Fairbairn. A few of the subjects of these memoirs are still living, but this, certainly, does not render the more important part of their history—already accomplished as we may believe—the less interesting.—*Engineer*.

'The chief names which figure in Mr. Smiles's pages are those of Dud Dudley, famous for his success in smelting iron with pit-coal; of Andrew Yarranton, an ingenious schemer in many ways, especially in respect of tin manufacture and iron-mining; of the Darbys and Reynoldses, of whom one invented cast-iron pots, another cast-iron rails, another constructed the first iron bridge, and another was the first to employ inclined planes for connecting and working canals of different levels; of Benjamin Huntsman, inventor of cast-steel; of Henry Cort, the founder of the fortunes of our "iron aristocracy," though he himself died unrewarded; of Dr. Roebuck, the now-forgotten metallurgist; of David Mushet, the discoverer of the Black Band ironstone; of James Beaumont Neilson, the inventor of the hot blast; of Joseph Bramah, whose lock remained for years unpicked, and took Hobbs, the American, sixteen days to pick it, whose cunning hand wrought many an engine, and whose hydraulic press is his monument for ever; of the Maudslays and Brunel; of Joseph Clement, the various inventor and various improver; of Fox of Derby, and Murray of Leeds, and Roberts and Whitworth of Manchester; of James Nasmyth, whose steam-hammer makes his family name sound like a paradox; and last, but not least, of William Fairbairn. One great advantage of the book is that it may be taken up at any time with profit; for, whilst it excites admiration and wonder at the powers which have been given to "inventive men," it either teaches the reader who is conscious of no such gifts humility, or urges him to examine himself and see whether there be not in himself, too, latent faculties—not of invention, perhaps, but of some other order—whereby he may benefit his fellow-men.'—*Illustrated News*.

'The book is a history of iron and the progress of iron manufacture in Great Britain, from the time that the smith sat in the great hall with the king and queen at the Royal Court of Wales, down to our own age, when iron navies sweep the ocean and iron highways encircle the earth—when iron has become monarch of the globe. The work, like Mr. Smiles's books, is wonderfully attractive reading, as much on account of the simple and pleasing style of the author, as because the biographical and strictly human interest abounds over the purely historical. Though iron be the basis of modern civilization, a mere dry history of iron and the progress of iron manufacture would, probably, satisfy but few literary appetites; yet the matter becomes at once of different aspect if the human beings whose brains and hands shaped and moulded the bountiful ore get into the foreground, and their history is connected with the history of the great metal. What makes Mr. Smiles's new work still more interesting is, that the biographies of the "iron-workers and tool-makers" are entirely novel, and drawn from private and hitherto unpublished sources. Companions of work, friends, and relations have furnished the materials of the lives now given to the world, and which, in all probability, would have otherwise been entirely lost.'—*Spectator*.

'This is not a very large book, but it is astonishing how much individual, conscientious, and thoroughly original research, has been required for its composition, and how much interesting matter it contains which we possess in no other form. Mr. Smiles rescues no name, but many histories, from oblivion. His heroes are known and gratefully remembered for the benefits they have conferred on mankind, but our knowledge of our benefactors has hitherto been mostly confined to our knowledge of the benefit. It was reserved for Mr. Smiles to discover in the workshop heroes as true as ever hurled their battalions across a battle-field, and to present us with much-enduring, much-endeavouring, and brave men, where hitherto we had been content with disembodied, almost meaningless names. The present work is farther distinguished, not indeed from its predecessors, but from much of the current literature, by the exquisitely pellucid English, the vigorous but unobtrusive style, in which the narratives are conveyed. The value of the work before us is doubled, and the time required for perusing and especially for consulting it halved, by the full and minute index in which its contents are tabulated.'—*Edinburgh Daily Review*.

'As we read the narrative of the progress of iron-manufacture in Mr. Smiles's volume we feel more and more proud of the country that has given such men birth, and who have added to the greatness of its prosperity and fame. Even although there are many instances exhibited where failure was the only reward of the inventor in his day and generation, because of the time in which he lived not being ripe enough to permit its denizens to grasp improvement and give it form and presence, yet it is clearly enough instanced that their

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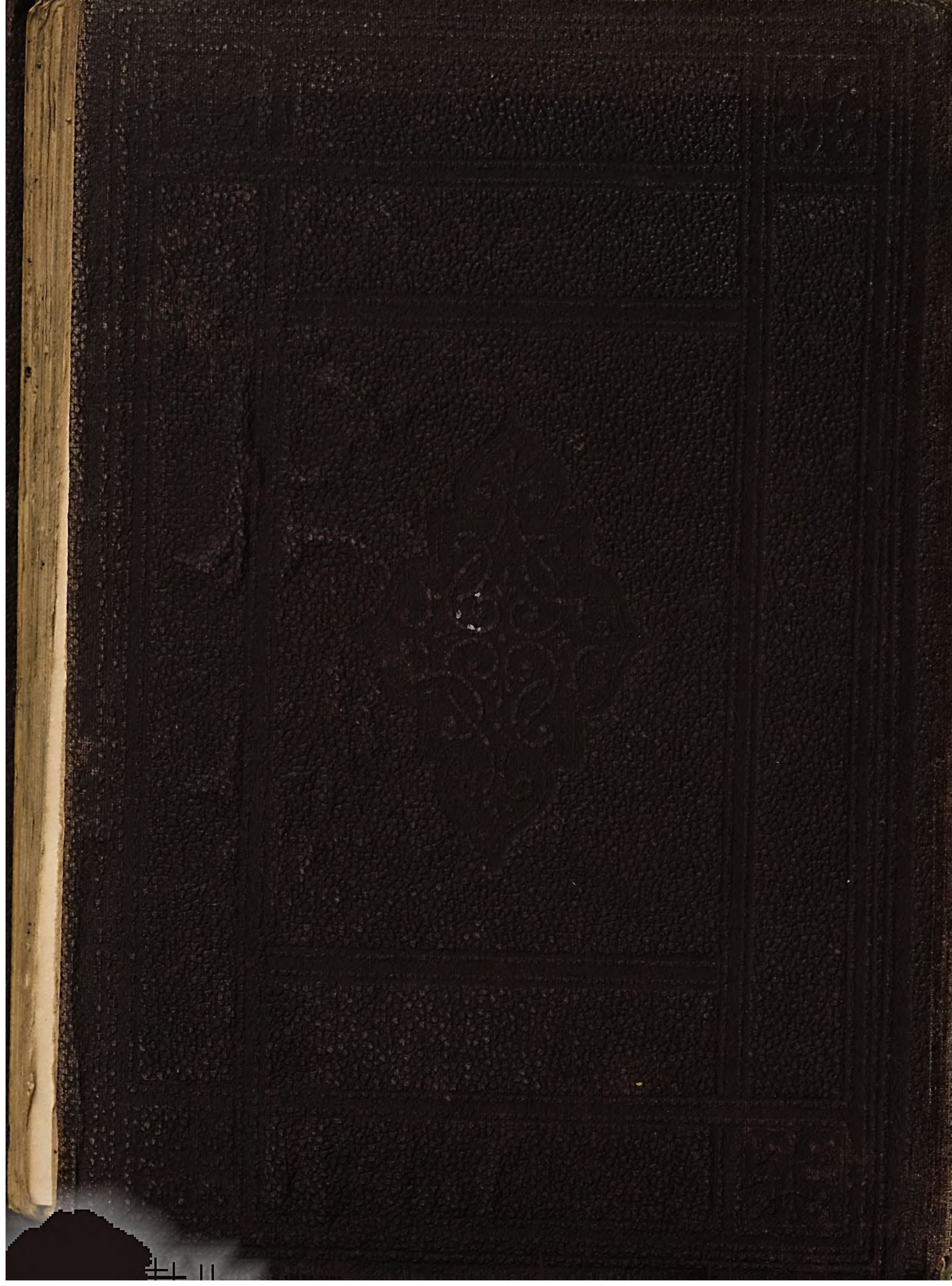
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